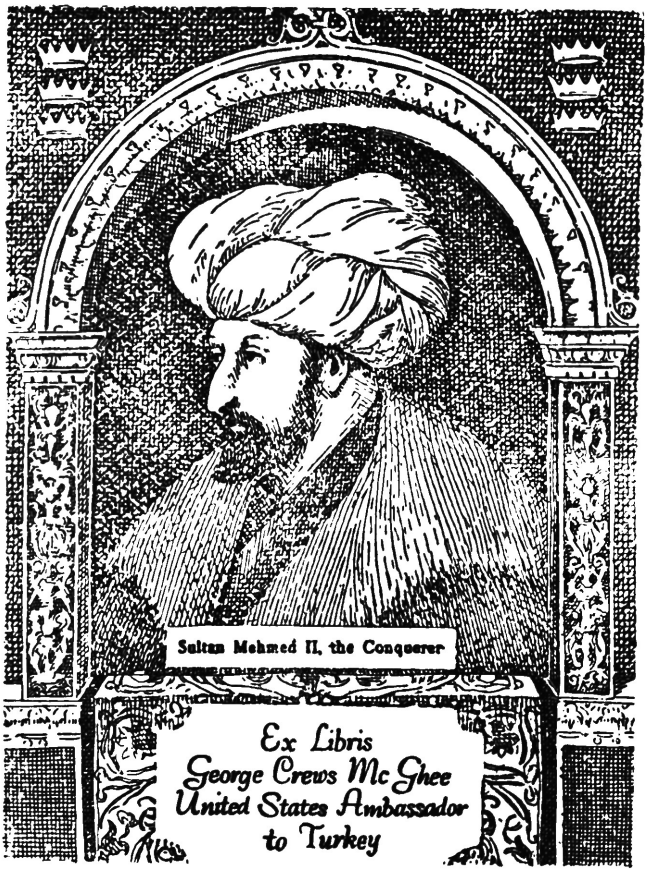
McGhee
522


Sultan Mehmed II, the Conqueror
Ex Libris
George Crews Mc Ghee
United States Ambassador
to Turkey

FOR OFFICIAL USE ONLY

This book is the property of H.M. Government. Its contents are not to be communicated either directly or indirectly to the Press, or to any person not holding an official position in H.M. Service.

CANCELLED

Not official use only.

Attention is called to the penalties attaching to any infraction of the Official Secrets Act.

NOTES ON THE GEOGRAPHY OF ASIA MINOR

Prepared on behalf of the Admiralty

ADMIRALTY WAR STAFF
INTELLIGENCE DIVISION
(I. D. 1104) June 1916

NOTE

THE brief description of Asia Minor given in the following pages sets forth in outline the principal geographical features of a region about which comparatively little is generally known and many erroneous notions are current. It will be seen that most of the country has been very little developed on modern lines, and the historical notes on early wars may therefore be of value as illustrating existing conditions.

Detailed information, so far as available, will be issued in a Handbook.

CONTENTS

SECTION		PAGE
I.	General Features	7
	The Central Plateau and the Coast Lands	7
	The Two Parts of the Central Plateau	9
	Communication on the Central Plateau	14
	Healthiness and Fertility of the Central Plateau	17
	Features of the great Central Plain	21
II.	Taurus and Anti-Taurus with the South Coast	23
III.	Access to the Plateau from the Sea	31
IV.	Main and Local Roads	41
	Roads crossing Anatolia East and West	41
	Roads on the Central Plain of the Plateau	47
V.	Old Military Operations	51
	Early Wars	52
	Roman Defences	53
	The Arabs and the Byzantine Empire	55
	The First Three Crusades	57
	The Wars of the Comneni	58
	Barbarossa	59
Map		*at end*

ASIA MINOR

SECTION I. General Features

(1) *The Central Plateau and the Coast Lands*

Asia Minor is an indefinite geographical name, which came into use in the Dark Ages. It corresponds roughly to the Turkish Anadol (Anatolia), but the latter excludes Karamania, the country south of Taurus, while Asia Minor includes it. Both terms cease to apply east of the Euphrates.

Asia Minor consists of a lofty oblong central plateau, projecting from the main mass of the continent of Asia, together with a fringe of coastland. The plateau is about 3,000 to 4,000 feet above sea-level, interspersed with many lofty, generally conical peaks ; it is a great limestone plateau through which rise volcanic cones ; it is bordered by a rim of mountains which divide it from the coastlands. This mountain rim is usually of considerable breadth and is generally very much broken and cut up by water-courses.

On the west this mountain rim is not so distinctly marked as on the north and south. It is, however, always present, and the traveller has always to ascend to the top of a ridge and descend again some way towards the general level of the main central plateau, but on the whole a great part of the rough mountain region on this side really represents the breaking down of the central plateau towards the coastal plain. The river valleys mark the limits of the plateau proper. Two of the rivers, the Kuchuk Menderez (Kayster) and the Bakir-Chai (Kaikos), obviously rise on the outer edge of the plateau, and their valleys represent arms of the sea-coast region divided from each other by narrow western extensions of the plateau. The other two rivers, the Gediz-Su (Hermus) and the Menderez (Maeander), which are much longer, rise far up in the plateau ; but even their upper parts are, as it were,

cracks in which the plateau is beginning to break down towards the sea-coast; and the bold mountain ridges, Tmolus, Messogis, &c., which divide the western-flowing rivers and usually end in hills that touch the sea, are (so to say) fingers which the plateau is stretching out towards the islands of the Aegean.

The coast valleys on all three sides of the plateau, and their extensions up the course of rivers that come down from the plateau, are extremely fertile, but as a rule are haunted by malarial fever. The less inhabited and the less cultivated each district is on the sea-coast, the more it seems to be the home of this fever. Beside Ephesus, for example, at the lower end of the Kuchuk Menderez, the area of cultivation has been greatly extended during the last forty years, and the result has been that this district is no longer infamous on account of the malaria danger, as it formerly was. It remains, however, very enervating.

The breadth of the coast lands varies very greatly. In some places there is no interval between the mountains and the sea, or only room for a road. In other places the coastal plain is of considerable breadth, as, for example, in Pamphylia on the south and in Bithynia on the north, and the low valleys continue up into the outer edge of the plateau along the course of many small streams and several considerable rivers.

The mountains which edge the plateau on the north possess a character of their own. They lie in a well-marked double ridge, consisting of two chains of mountains roughly parallel to one another, with important river valleys and lines of communication between them. Such are the roads from the Bosphorus by Ismid and Boli to Changri or to Tash-Köpru and on to the East.

By far the most characteristic edge of the plateau is that on the south, formed by the great range of mountains which has been famous under the name of Taurus from the very earliest historical period. Taurus has been always recognized as a political and linguistic boundary, and the countries ' on this side of Taurus ' and ' beyond Taurus ' have commonly been

separated in government, and probably in the racial character of the inhabitants, from the region of the central plateau.

Taurus is usually called a mountain ridge, but it is really an elevated plateau from 6,000 to 9,000 feet above the sea. In breadth it varies greatly, generally not less than fifty miles, but in some cases much more, according as the mass of the elevated plateau extends outward towards the north or approaches close to the sea on the south. The latter is especially the case in the region between Lycia and Pamphylia, where the mountains rise steep from the water's edge: also in some parts of western Cilicia (Rough Cilicia or Tracheia) the outer edge of the plateau approaches close to the sea.

In this elevated Taurus plateau there is an extraordinary diversity of conformation. In some cases there are very marked continuous high ridges, such as Bulghar-Dagh, which lies on the western side of the ridge leading down from the plateau to Bozanti and extends west and south-west for a considerable distance, till it gradually merges into the main mass of the elevated plateau. In this neighbourhood Taurus seems to run north-east to south-west, but on the north side of Pamphylia the mountain ridges appear to run directly north and south, both on the south side towards the coast and in the northern direction towards the plateau, where the great ridge which is called by the Turks Dîpdavras or Dipoiras[1] (8,000 feet or more), on the western side of the Bey-Sheher Lake, seems to be part of a mountain conformation similar to the lofty ridges which divide the valleys of the Pamphylian rivers on the south. Yet, only a little farther to the west, one finds that the ridges of Taurus again resume their general east to west direction.

(2) *The Two Parts of the Central Plateau*

The central and eastern part of the great plateau is a level plain, but the western part is occupied by what may be called

[1] The second part of Dîpdavras seems to be the modern pronunciation of the old name Taurus, with the modern Greek *av* in place of the diphthong; while Dipoiras looks like an attempt to get a word suggesting a meaning in Turkish, as *poiras* is the ordinary term for 'north'.

the Phrygian mountain region. The latter belongs to the plateau proper, and is clearly distinguished to the traveller from the mountain rim. It extends from about the longitude of Ushak to about thirty miles east of Afion-Kara-Hisar. The mountains which compose it have quite a different character from those of the Taurus region. They are, in general, bare and of no great height above the level of the plateau, and they are varied by wide and very fertile open river valleys. There are, however, several lofty ridges which interpose considerable, indeed almost insuperable, difficulties to direct communication by road: the chief of these is the Sultan-Dagh, which is a sort of axis of the entire region. Its highest peak, south of Chai on the Anatolian Railway, is over 8,000 feet in height.

The distinction between these two parts of the plateau—the western and the eastern—is very important, alike as regards communication and as regards weather.

It is a common error (seen for example in Philippson's useful book, *Das Mittelmeergebiet*) to speak too absolutely about the uniformity of conditions on the plateau. One may rightly contrast the dry plateau with the abundant moisture of the coastal plains and valleys. There is, however, a marked difference between the weather and conditions in general of the Phrygian mountain region and those of the central plain of the plateau. The plain is the most typical part of the plateau, but the Phrygian hills have their own special character.

This great open treeless plain[1] is extraordinarily level. Moltke, who travelled across it a little, speaks of it as the most level plain in the world. The comparison of this plain to the sea suggests itself naturally to many travellers. Moltke uses this illustration in the nineteenth century,[2] and so did Strabo in the time of Christ. The plain is varied by a number of isolated mountains, almost all of which are volcanic cones, rising through the level limestone plateau like islands in the sea. There is, however, an exception to this form of the mountains

[1] It was called Axylon, woodless, in ancient times.

[2] In his *Letters from Turkey*.

—Boz-Dagh is a bare, comparatively low ridge which runs out from the Phrygian Mountains in a south-easterly direction for about 45 miles, starting immediately south of Ladik and a little to the north of Konia. The height of the passes across the Boz-Dagh is not more than about 500 to 600 feet above the central plateau, and there is one pass between Tutup and Egri-Baiyat which is barely 100 feet above that level. This last pass was chosen by the Ottoman Railway for the line which it projected to Konia, but the German engineers of the Anatolian Railway preferred to cross Boz-Dagh nearer the central Phrygian hills, where it is much higher. The train now crosses this mountain by a series of curves at a very low rate of speed : sometimes the engine is barely able to bring the heavy train up to the top of the ridge. The pass which was preferred by the Ottoman Railway lies about ten miles out towards the south-east, but it presents such advantages for a railway line that one wonders why it was neglected by the German surveyors. Possibly they did not go far enough out from the line of the road to become aware of its existence, but contented themselves with finding a feasible way close at hand. The measured distance is nearly the same ; but the difference in time and ease is considerable. That outlying pass to Egri-Baiyat is so easy that it will some day become important in the road-system when the central plateau is cultivated and developed. It is the line of the modern road from Konia to Angora, and is shown by Roman milestones to have been the ancient road. The village of Egri-Baiyat lies at the south end of the pass ; and the village of Tutup at the north end.

There is a marked difference between the amount and times of rainfall on the central plain and in the Phrygian mountain region, the two diverse parts of the main plateau. The open plain is very dry : not that there is any great lack of moisture on the annual average, but that the moisture falls only in certain seasons and usually in such quantity as to do harm rather than good. On the other hand, the Phrygian mountain region enjoys an abundant rainfall, well distributed over the year and often very heavy. In some parts it may be

called a moist region. To take the two great centres, Afion-Kara-Hisar and Yalovach (Antioch): they both lie near lofty peaks which seem to cause a succession of rain-storms throughout the spring and early summer.

The rain when it falls in May and June is regarded as a god-send to the farmer, but when it falls in July it does harm rather than good, especially if it comes during the opium-gathering, which lasts three days: if any rain falls then, the crop is lost. Twice during the period 1904–12 there has been a wet June on the western plateau. The rain has fallen almost continuously, and during such a June travelling and transport become very difficult and even impossible except to small parties on foot or on horseback. The rains of summer, however, do not extend far out on to the central plain. In such weather on the open plain a wonderful sight may be observed, especially in the evening, when thunder-storms break simultaneously on the mountains to the west and north and south and south-east and the flashes of lightning are almost continuous. In such a case, the weather of the central plain is cold and sunless; and, occasionally, the extreme fringe of a storm reaches out to the plain for an hour or so. In the mountain region, on the contrary, there is nothing but mist and rain throughout the whole time. The peasantry enjoy such a season, as they know it means an excellent harvest. Refugees from Roumelia, who were settled in new villages over the great plain, broke new ground which, apparently, had never been cultivated since the Turkish conquest, and they were seen sowing corn as late as the middle of June. It was remarkable that mosquitoes, which had been entirely unknown in the central plain, immediately followed cultivation, and for one or two years later were troublesome even in this very dry region. On the other hand, drought in May and June implies a bad harvest, whereas a dry April is favourable to the harvest, for the soil then retains in it sufficient moisture from the winter.

The harvest, therefore, is in modern times wholly dependent on the chances of an uncertain rainfall, as no attempt is ever

made to store the water that falls. In ancient times, on the contrary, great attention was paid to the storage of water from winter and spring. Cisterns of large size were cut in the rocks, where rock was available, as in the very dry volcanic region between Kara-Bunar and Kara-Dagh and Karaja-Dagh; and pieces of ancient terra-cotta piping, evidently used for a water-course, have been offered for sale in a village in the driest part of the plain between Sultan-Khan and Boz-Dagh. Again, there is a great ancient barrage five or six miles east of Qadin Khan, on the Anatolian Railway. Examples like these come before the traveller in many parts of the country. These ancient operations of water-engineering were conducted under religious direction; their construction and maintenance being prescribed by the goddess through her priests.

In ancient times there was perhaps greater precipitation on the outer or eastern side of the Phrygian mountain region. It is stated on the authority of an engineer in charge of the German irrigation works south and south-west of Konia, that the course of a number of streams which flowed down into the Konia district from the mountain region on the west, and which are now entirely waterless, can be traced. Similarly, in the barrage, which has just been mentioned, on the east edge of these same mountains, no water seems now ever to be caught.

There has been very serious destruction of forests in the mountains; a process which has been going on through the carelessness and indifference of the semi-Turkish nomads, wherever woods continued to live in the mountain region. In the country south-east of Kutaya, for example, a great forest of fir-trees was killed in the year 1880 by a forest fire. The Yuruk who wishes to get a log of wood burns down a convenient tree, and the fire in dry weather often spreads as far as there are trees to burn. No young trees can live where goats are numerous.

The Kara-Dagh, south-east from Konia, now nearly bare, was once much better wooded. Traces of forest remain, and broken terracing to hold up the water (which now runs down in flood and sometimes overwhelms fields of corn with gravel).

Formerly the roots of the trees detained the water, and the rainfall benefited the country which now it injures. Waste of rain has done much more harm than any possible diminution in rainfall.

In winter the weather is very severe, alike in the Phrygian mountain regions and on the central plain. Snow lies for a considerable time; and in the year 1907 the snow lay so late and so deep all over the plateau that the great herds of sheep and goats which are fed there suffered severely.[1] It was said that 75 per cent. of the lambs died; even the storks found that there was nothing to live on, and numbers of storks were seen lying dead here and there over the plains. It was a remarkable fact that in the following year the storks were six weeks late in appearing. There is, however, great variation in the severity of the winter; and the coming of rain and thaw may take place at any time in the spring, sometimes early, sometimes late. When the spring rains begin, the whole of the plateau becomes impassable owing to the depth of the mud.

(3) *Communication on the Central Plateau*

In November 1881 it was found that the weather in the Phrygian mountain region, though quite dry, was extremely cold and the country was entirely frozen. On the other hand, in October 1883, rain fell for three weeks heavily and continuously. Differences depend largely on the winds; the north is dry and cold, while the south brings rain.

In these circumstances the construction of well-built roads, both in the mountain region and the level part of the plateau, assumes great importance. Wheeled traffic can be carried along these roads at any time except when the snow is too deep, but Turkish roads have an annoying habit of breaking off suddenly and leaving the traveller face to face with the natural unbuilt path through the mud. The most important

[1] Basil alludes to one great storm of this kind about A. D. 370, implying that such stormy weather was usual in winter. Strabo alludes to great flocks on the plains in his day.

of these roads is that which connects Konia with Karaman and Eregli on the south-east and Ladik and Aq-Sheher on the north-west.[1] There is also a very good road, extremely well engineered, across the mountains near the end of Sultan-Dagh immediately to the south-west of Aq-Sheher. This road was intended to bring the produce of the very fertile valley of Yalovach (Antioch) and Karagach (Neapolis) to the German Railway, but though excellently built from Aq-Sheher to the other side of the mountains, a distance of about 20 miles, it stops when it reaches the open ground, and there are few places in the whole of Asia Minor where the ways are worse than from this point to Yalovach, a distance of 12 miles. Another carefully built road runs from Dineir on the Ottoman Railway to Sandukli and Afion-Kara-Hisar; and there is also a good road from Chai to Bolawadun and Aziziyeh. This, naturally, ought to continue to Sivri-Hisar and Angora, crossing the Sakaria (Sangarios) by Chandir bridge, but one cannot say whether this intention has been carried out.

After the summer weather definitely sets in, the central plain can be traversed in almost any direction and starting from any point. Owing to the dry and level character of the great central plain, there are very few streams or dry water-channels, and hardly any irrigation channels. There are, occasionally, some slight difficulties, but these are rarely of any consequence. For example, it is necessary to avoid stumbling on the Ala-Dagh. As a general rule, mountains can be seen and avoided, but the traveller finds himself involved on the low, bald summit of Ala-Dagh before he is aware that he is on a hill. It lies about 40 miles west of the great Salt Lake.

With regard to communication on the plateau, everything is easy in dry weather. The Phrygian mountain region is traversed by several natural paths, some leading north and south, some leading approximately east and west. The continuation of the trade route from the Maeander valley and Dineir goes along a series of open, long glens for about 70 miles

[1] This road connects with the Cilician Gates route and north-east with Kaisari.

till it comes near Chai, a station on the German Anatolian Railway. Here it makes a rather sharp descent of 300 to 400 feet, which is simply the edge of a plateau lying above the level of the great valley of Phrygia Paroreios.

This Paroreios valley, the most important line of communication in the western part of the plateau, is about five to fifteen miles broad and extends from beyond Afion-Kara-Hisar on the north-west right on till it merges in the open Lycaonian Plain. It is bounded for a considerable distance on the south-west and south by the lofty ridge of Sultan-Dagh (8,000 ft.) and on the other side by the lower Emir Dagh. The contrast between the two ridges is striking to the eye; one sharp and lofty, the other low, bare and featureless; and is marked in the popular Turkish names, Sultan and Emir. The valley of Paroreios in its upper part runs, in general, from WNW. to ESE., but after passing the railway station of Aq-Sheher (Philomelion) it turns due eastward and gradually merges into the open central plain. The Anatolian Railway traverses this throughout its entire length, and after reaching Serai-Ini (the station for Ladik) the railway turns south to cross the Boz-Dagh and to reach Konia. The original intention of the British Ottoman Railway from Smyrna was to emerge on this plain at Chai and then to follow the line which the German Railway has taken to Konia, but there are two divergences between the routes chosen. The German Railway, after leaving Aq-Sheher, turns away due east and even slightly north of east for 28 miles to Chaushji-Köi and then turns south to Ilghin. This involves a great detour,[1] and the survey plan for the Ottoman Railway followed

[1] The reason for this considerable detour used to be attributed by popular gossip to the desire to make the railway longer, and so increase the amount of the kilometric guarantee paid annually by the Turkish Government; but it is possible that the road-bed presented advantages on the line chosen, although that line leads away from habitation and agriculture into an almost uninhabited district (where want of water is severely felt), until the railway rejoins at Ilghin the main line of ancient and modern communication, the central trade route. Chaushji-Köi lake is only a great marsh given up to reeds and mosquitoes.

the caravan road direct from Aq-Sheher to Ilghin. The other divergence was in the crossing of the Boz-Dagh, for which see p. 11.

(4) *Healthiness and Fertility of the Central Plateau*

In summer the weather of the great plains, on the whole, is extremely pleasant and invigorating, except when the wind is in the south; but the north wind, always a dry and health-bringing breeze, blows very frequently. The peasants use it to winnow their corn, throwing up the produce of the threshing-floor into the air with shovels, so that the wind may blow away the chaff to a little distance, while the grain falls close.

As to the conditions of health on the plateau, these are almost everywhere excellent. The atmosphere at this high altitude is fresh and invigorating: the heat by day, though often great, is rarely felt to be oppressive, and the cool nights always require the traveller to put on some extra covering after sunset, if he is in camp. Towns and houses, however, retain the heat, and are sometimes oppressive. Malaria is rare on the plateau, and though mosquitoes abound where there is water, they do not, as a rule, appear to be the kind that communicate the germ of malaria. An American doctor in Konia, who had the experience of many years, has stated that malarial fever was not common. In Konia itself he had found a few cases in recent years, but these were all in the district beside the railway station and the hotel. The managers of the hotel have taken great trouble to make a garden and to plant shade-producing trees, the result of which has been to foster mosquitoes. Until within the last few years Konia was absolutely free from mosquitoes, though the small sand-fly was troublesome in hot weather. But wherever moisture and vegetation are fostered there mosquitoes establish themselves, and if the malaria germ is present through the coming of strangers from the low country there fever seems to begin. This is the case, for example, in the stations and towns of Aq-Sheher and Ilghin on the Anatolian

Railway. On the other hand, at Yalovach, although the mosquitoes are numerous along and near the course of the stream that flows through the town, yet there seems not to be a trace of malarial fever. These mosquitoes appear, even to the unscientific eye, quite different from the malaria-bearing mosquitoes. They are, however, rather troublesome, and they are found in suitable weather on the top of a peak fully 5,000 feet in height, which overhangs Yalovach about five miles to the south-east. Yet Yalovach is a place admirably suited to be a sanatorium for malarial fever, and it bears that reputation throughout the neighbouring country.

The native population have a good idea of health conditions in certain respects, and they distinguish between one place as a sanatorium, and another where the air is heavy and unhealthy. The latter is the case with such places as Bey-Sheher, at the exit of the river from the great lake, and the south-eastern edge of the Lycaonian plain, where there is a small lake liable to great variation in level, and consequently marshy ground favourable to mosquitoes. But, as a whole, with insignificant exceptions, the health conditions of the plateau are excellent except in so far as the dirty habits of the natives and the prevalence of certain diseases make towns and villages insanitary. Even then, however, the sun of summer is a great purifier and disinfectant.

In this, as in many other respects, there is a marked contrast between the coast valleys and the central plateau.

The soil of the plateau is generally, except on the hills, deep and rich and free from stones to a considerable depth. This soil in summer is liable to rise in dust clouds when disturbed on the surface, but after two or three days of rain, it turns into a sea of mud several feet deep. Travelling then becomes, as has been said, impossible for wheeled vehicles, except on a properly built road, which is usually called by the Turks *chaussée* or *jadde*.

There is a widely spread opinion that the central plain is a desert, uninhabited and almost uninhabitable, but this,

though it has affected Kiepert's old map, where the name 'desert salé' is printed over this region, is very far from correct. In ancient times there was certainly a fairly large population, and there were many towns sufficiently important to strike their own copper coinage. In modern times one is rarely far distant from a village. Most of them are small, and in a number of cases they are only summer villages or *Yaila*, but a small party of travellers has no difficulty whatsoever in traversing any part of the central plains. The difficulty for a larger party lies in two conditions.

In the first place, the supply of fresh water is inadequate. There can be no doubt that there is abundant water under the surface to be reached by wells, but in some places the wells have to be very deep, as Strabo mentions. There would certainly be no difficulty in finding a much larger supply of fresh water if wells were multiplied. The cisterns which were used for water storage by the ancients have sometimes been allowed to become choked up, and in other cases are so dirty that the water is dangerous. Along the principal roads which traverse the central plain, there are little modern cisterns above the ground, where the piety of former worthy Moslems has established a water-supply for thirsty travellers, with a small provision for maintenance; but these should always be avoided, as they have probably never been cleaned from the time that they were made. Animals also are sometimes drowned in the wells. Such accidents as this are not suggestive of permanent excellence of the water, and the water on the open plain should be avoided, except after boiling. There are also a number of brackish wells, whose water is given to the great flocks of sheep and goats which pasture all over the central plain, but is quite undrinkable by human beings. Sometimes a well of fresh and a well of brackish water are found within 100 or 200 yards of one another; presumably they reach water at different levels.

In the western part of the plateau, viz. the Phrygian mountain region, the water is almost everywhere good, and springs are abundant.

The other difficulty lies in feeding the horses. There is a very inadequate supply of fodder, proportioned only to the ordinary wants of the scanty population, and in the late spring and early summer, before the new harvest is ready, it is often extremely difficult even for quite a small party to find food for the horses. The native horses are fed on the fine-chopped straw which is left on the threshing-floor after the harvest is garnered, and the Turkish horses seem to enjoy this feed and are able to maintain life on it very well, but when they have work to do, a certain amount of barley must be mixed with it. The horse's feed is so arranged that he begins with a little chopped straw, called *Saman* by the Turks. After eating his way through this, he comes to the barley, and after he has eaten the barley he comes to a bottom layer of *Saman*. Possibly horses that had not been accustomed to this chopped straw would not be able to live on it. Turkish horses have to be allowed a month or more at grass every spring to keep them in health.

There would also be some difficulty in feeding the men of a large party, though it is always easy for a small party to find sufficient food of a kind, and the villagers are usually willing to sell lambs at a reasonable price.

Great flocks of sheep and goats are bred partly for wool and mohair (the product of the Angora goat), but a large number of lambs are taken down to Constantinople every year to supply the market. The instance is recorded of a Kurd who possessed a comparatively small establishment which he had not inherited but made for himself by prudence and forethought, and who sent every year about 2,000 lambs to Constantinople. In former times there was a regular drovers' road across the central plain, taking a zigzag direction for the purpose of using the rare opportunities of grass, but the lambs are said to be now sent by rail, and the road has passed out of use and into oblivion. The path is important, because it marks the best line of water-supply, but it is more than twice as long as the direct road across the central plain. Sheep need little water, but the water makes a better supply of grass.

This road was described by a shepherd in 1883 as follows, starting from Qir-Sheher beyond the Halys. The drovers travelled across the Halys by Aq-Serai, Ajem 5 hrs., Sultan Khan 10,[1] Eskil 14, Obruk 18, Suwerik 22, Qözlu 28, Qolu Qissa 30, Kara-Göz 36, Aq-Göl 38½, Cheltik 41½, Ferikli, and so by Torbalu towards the Bosphorus ; altogether about 45 days from Qir Sheher to Constantinople. In almost all the places named there is known to be an excellent water-supply, often a very abundant fountain, or even a flowing river. Kara-Göz has not been visited by any European, but Göz often means a source of water (literally it means eye), and it is described as only 6 miles from Aq-Göl. The shepherd reckoning in hours is very vague. The following list of very large fountains off that line is not exhaustive; the Sakaria sources at Chifteler, Alikel fountains, Renk-oglu (Ireng-oglu) and Teuk-Bunar, all flowing to the Sakaria (Sangarios), Bughru-Delik (west of the Salt Lake) and the fountains west of Serai-ini flowing to Qözlu ; both the last are lost in the plain.

The flesh of the Anatolian sheep after its first year becomes very strong-tasted ; and therefore it is useless sending to market any sheep, but only lambs.

(5) *Features of the great Central Plain*

What may be called the great plain of the central plateau extends eastwards from the outer edge of the Phrygian mountains. This edge runs in a direction SSE. from about Eski Sheher to Emir-Dagh, on the north-east of the plain of Paroreios, which is the outer limit in the middle, and the South-Phrygian (or Pisidian) mountains, which approach close to Ladik and Konia, form the boundary towards the south. These merge into the mountains of Taurus. From this irregular line the great plain extends away beyond Kaisari to the line of the Anti-Taurus on the east. On the south this plain is narrowest, and here it is bounded by the main mass of Taurus, which rises like a wall straight up from the plain, and

[1] Shepherds' hours reckoned from Aq-Serai.

forms an extremely striking feature of the landscape. East of Kaisari, as has been said, the plain extends to the Anti-Taurus. To the south of Kaisari the plain is bounded much farther west by the lofty ridge of Ala-Dagh, about 10,000 feet, which protrudes to the north from the Taurus. On the north side this plain extends up to the irregular mountain rim, which bounds the whole of the plateau in the region of Galatia and Pontus ; but the Galatian mountains or hills of the Haimane are included within it.

Among the many striking features of the plain are : (1) the Salt Lake, Tuz-göl (Tatta), the largest body of water in Asia Minor in superficial extent, but for the most part extremely shallow, and therefore containing a smaller mass of water than Bey-Sheher Lake. It is said to be even more salt than the Dead Sea, at least in the summer season, when the level of the water is low. In the spring it is swollen with fresher water from the winter rains and the one or two streams which enter it ; (2) Hassan-Dagh (Lesser Argaeus), a double cone which rises to the height of about 10,000 feet between Aq-Serai and Nigde, and is visible from a very great distance all round on the level plain ; (3) the line of volcanic peaks called Kara-Dagh and Karaja-Dagh, running from south-west to north-east. The highest peak of the Kara-Dagh is about 7,000 feet. The highest point of the Karaja-Dagh seems to be less, perhaps about 6,500 feet ; but this ridge extends to a much greater length than Kara-Dagh, which is nearly circular. Between them there extends across the plain a line of small volcanic peaks, rising only about a few hundred feet or less above the plain. The remarkable features of this volcanic region as a whole well deserve examination by a competent geologist. At the north-eastern end of Karaja-Dagh, there is another lower mountain, called Arissama-Dagh. It is divided from Karaja-Dagh by a space about five miles in breadth, which is only a little elevated above the general level of the plain, forming a pass which must have been extremely important in the wars of defence against the Arabs in the eighth and ninth centuries after Christ. The central and highest peak of

Arissama-Dagh is crowned by a mediaeval castle, which must have been impregnable in the frontier warfare. The peak, even without any defences, is so steep as to cause some difficulty in the ascent, and the fortifications are of great extent and could hold a fair-sized garrison, which could maintain itself, provided it had food and water, for any period, and would be sufficiently numerous to make incursions, as opportunity offered, on the rear of the Arab forces; (4) North of Kara-Bunar lake (little more than a bed of reeds), there is a district where the upper stratum of the plain ceases (probably through the action of water, and not owing to a fault): the edge of this gap is very steep, about 300 ft. deep, on the west, but not so well-defined on the east, 20 to 30 kilometres away. The north limit is unknown. Kara-Bunar lake is in its southern extension. In the great plains west are two circular holes of about the same depth, a quarter of a mile in diameter, each with a lake at the bottom; one is at Obruk, and one west of the gap in the plain at Cheralli. The latter can be descended only by a built path. A few miles from the latter, at Meghil, NE. from Genne, is a similar, but not so well-defined, hole and lake; it shows the progress of water action; (5) Erjish-Dagh (Mt. Argaeus), which rises close to the south of Kaisari. It is the most elevated mountain of Anatolia proper, nearly 13,000 feet, and its summit is covered with snow throughout the year.

SECTION II

Taurus and Anti-Taurus with the South Coast

The coastlands south of Taurus are very varied in type. They fall into three divisions. On the west, the Lycian country consists chiefly of the valleys of a number of rivers which run down from the mountains of Taurus and offer very fertile opportunities along their courses. This country is divided from the middle region, Pamphylia, by a lofty arm of

Taurus, which extends right down to the sea, impeding even passage by road along the coast. Pamphylia consists of a considerable coastal plain, together with the valleys of several rivers which run down straight south through the front of Taurus towards the sea. There are two harbours of no value for modern ships, Adalia (Attalia) at the western end, and Alaya at the eastern end of the plain. To modern ships they offer nothing but a roadstead and anchorage, though they possessed great importance as harbours or sea-stations for the small ships of ancient times. The importance of Adalia lies mainly in its connexion with the roads. Alaya is now altogether secondary, and very few even of the small steamers engaged in the coast trade touch at it.

It deserves note that in the Byzantine period there was a great naval and military station on the coast at or near Alaya, called the Thema of Kibyra. This Thema was charged with the defence of the coastlands and sea-valleys south of Taurus, regions which could not be protected by access from the plateau owing to the difficulty of communication. Access by sea and command of the sea was necessary to maintain the hold over those regions from Constantinople, as capital: and in fact the Byzantine authority over them continued long after the Turks took possession of the central plateau in 1071–4. This Thema guarded not merely Pamphylia, Southern Isauria, and Lycia, but also Cilicia on the east and part of Caria on the west. Cilicia was hardly entered by the Turks until Sultan Selim's conquests in Syria and Egypt began, about 1516; previously, the land was held or divided between Byzantines, Armenians (the kingdom of Lesser Armenia was practically Cilicia), Ramazanoglu Turkmens, and Memluks of Egypt. For the whole Kibyrrhaiote Thema Alaya must have been the central harbour (though Kibyra is placed farther west by the latest Austrian travellers on this coast).

East of Pamphylia a broad belt of mountain country with a narrow strip of land between hills and sea (called Rough Cilicia) effectively divides Pamphylia from the Cilician plain. This large tract of intermediate hill country had distinct

importance in ancient times, and supported a considerable population with a number of large cities, but under Turkish rule all the hill country has degenerated into rough hill pasturage, with an extremely scanty population of nomads or semi-nomads, mainly Yuruk. About the middle of this hill region there is the mouth of the Gök-Su (Kalykadnos), where the river has gradually formed a considerable tract of new land. There is here, at some distance from the water, the town of Selefke (Seleukeia), which has been the administrative centre of the entire hill region between Pamphylia and Cilicia throughout Byzantine and Turkish times. Administratively this intermediate region has generally ranked as a part of Cilicia.

Cilicia proper, namely the plain, lies between the mountains of Taurus on the north, Amanus on the east, and the sea on the south. It is by nature divided in racial character and in history from the central plateau on the north of Taurus; and the passes over Taurus to the plateau are mostly difficult, and were all easily defensible in ancient warfare against an enemy, provided that the defenders had possession of the summits. This line of mountains formed, as a rule, the division between the Arab country and the Byzantine for more than two centuries in the long period of frontier wars, and each side was always struggling to obtain command of the passes, and specially of the one most important pass which takes its name from the Cilician Gates. Along this pass there was a series of forts which were held sometimes by the Byzantine troops and sometimes by the Arabs.

In a military point of view, there are two facts to be noticed. In the first place, even the light raiding armies or bands of the Arabs seem rarely to have used any other pass over Taurus than the Cilician Gates. Some cases are mentioned where parties of Arab raiders crossed by some of the other paths, and this entailed constant watchfulness on the part of the Byzantine commanders, but when there was a really effective movement by a large army from the Arab side, it always crossed by the Cilician Gates, which shows that the other passes were

not suited to carry even the moderate equipment that a Saracen army took with it. In the second place, the Arabs never permanently succeeded in establishing themselves on the north side of Taurus. Armies and bands of horsemen raided the plateau year after year for more than two centuries, even twice in one year, and sometimes three times, but they always returned without leaving any garrison in Asia Minor north of Taurus, except for a few years about A.D. 800, when an attempt was made to hold Tyana, lying in a very fertile part of the plateau, some little distance north of the upper end of the great pass of the Cilician Gates. But this attempt was not maintained, and soon the Arabs returned to the old frontier system of the mountains, according to which Tarsus was the centre of their power in this quarter, forming a sort of secondary capital to the Saracen Empire: Baghdad, of course, being supreme and alone.

This failure of the Arabs to establish themselves on the plateau stands in marked contrast to the success of the Turks, who began by seizing the whole of the central plateau,[1] although the Cilician coast-lands still remained subject to the Byzantine authority, and were not conquered by the Turks until Selim overran Cilicia, Syria, and Egypt, about A.D. 1516. Constantinople was able by its fleet to command the whole southern coast south of the Taurus for some centuries after the Turks conquered the plateau in 1070. The contrast is a striking one, and is very suggestive to the student of mediaeval and modern conditions.

Cilicia is connected more easily with Syria than with the plateau. Its population is more Oriental in type than that of the plateau, and, in an administrative point of view, Cilicia has been connected more commonly with Syria than with the

[1] This easy conquest after one victory at Mauzikut in Armenia was due partly to the weakness of the Empire and the incapacity of several pretenders to the throne, partly to the fact (not mentioned by Byzantine or modern historians) that an agreement was made by one of the rival candidates for the Byzantine throne to hand over the whole plateau to the Seljuk Turks.

Anatolian plateau. The type of the inhabitants is markedly different. The traveller coming down from the plateau to the Cilician plain observes at once that he is in a country of totally different character. Arabic is widely spoken, or at least understood, whereas on the plateau Arabic is practically unknown. The outlook of Cilicia is towards the south and the east, that is to the sea, and to Syria rather than to Anatolia. Mount Amanus (Giaour-Dagh) does not form a division that presents nearly so great difficulty to the march of armies as Taurus; and accordingly while the Turks held the plateau, the Byzantine rule over any part of Cilicia was ended by Egyptian conquest through Syria.

The Cilician plain has always been famous as one of the most fertile districts in the Mediterranean world. It falls into two parts, according to natural divisions. The western is the larger, containing about 800 square miles of fertile land, with the towns of Adana and Tarsus and the harbour of Mersina; these three towns have long been connected with one another by a railway, originally built by British enterprise, which passed into the hands of the Baghdad Railway by private agreement some years ago. The eastern plain contains about 680 square miles of good arable land, with the ancient capital at Anazarba, the ancient religious centre at Budrum (Hierapolis), and the modern capital, both political and ecclesiastical, at Sis, in the extreme north. This eastern plain is divided from the sea by a ridge of hills running along the coast; and the line of the Baghdad Railway passes from Adana by Missis, where it crosses the Jihan (Pyramos) by a long bridge, to Osmania, soon after which it begins the ascent of the ridge of Giaour-Dagh (pass height about 1,990 ft.[1]). This mountain, called in ancient times Amanus, projects southwards from the Taurus and passes near the coast on the east side of Alexandretta. There is another route (2,000 ft.[1]) over Amanus, leading inland from the harbour of Alexandretta over Beilan Pass, but the

[1] Aneroid reading on the road. It was stated many years ago, by the manager of the British Railway at Mersina, that according to his survey of an extension to Aleppo, the railway would cross at little over 1,800 ft.

Baghdad Railway naturally avoids this route, because, although from a commercial point of view it presents some marked advantages, it leads along the sea-shore for a considerable distance before reaching Alexandretta, and therefore, from a military point of view, is regarded as impossible, because exposed to sea-attack.

There is no proper harbour on the Cilician coast for even small merchant steamers. They have to lie out in the roads and discharge cargo by lighters. The principal ports are Mersina and Alexandretta, and all trade passes through one or other of these outlets. Ayas (Yimurtalik Bay), half-way between them, is little used, although its situation has been described as advantageous.

In regard to conditions of health, the Cilician plain shares in the ill-repute which attaches to the whole Levant coast of Asia Minor, and it is especially the immediate neighbourhood of Tarsus on the railway which is most trying to human beings. Vast marshes occupy a great part of the district between Tarsus and the sea, a distance of ten to twelve miles, and these are infested by countless clouds of flies of all kinds, by night and by day. In 1902 the writer was anxious to ride down to the sea from Tarsus. His companion was a Pathan, from the Afghan frontier, who (as he said) had been a soldier in the Guides, had made the pilgrimage to Mecca, and, finally, had drifted in unexplained ways to the protection of the British Consul at Mersina. Even he, however, though about as hard a man as could easily be found, found it impossible, after riding about six miles, to force his horse to face the clouds of flies which made life a burden to it. Human beings, even with every advantage of knowledge and forethought, find life in the Cilician plain trying to health, and men who had no experience of life and travel in such regions would certainly suffer severely, and a large proportion of them would have their value seriously impaired by illness. With a view to good health the time when travel on the coastal plain of Cilicia or occupation of it, even for a temporary purpose, should be arranged is in the winter or spring. Later than the middle of May the conditions

become extremely unfavourable and continue to become worse through the summer and autumn, as the marshes gradually dry to a certain degree. These statements apply only to the plain, but there is between the plain and the mountains of Taurus an intermediate hill country, sometimes of considerable breadth. These foot-hills come down quite close to Mersina, Tarsus, and Adana, and they offer healthy habitation in quite invigorating conditions to the population of the plain. Tarsus, for example, which was for more than two thousand years the principal city of the plain, could never have maintained the vigour of its inhabitants, unless they had been able to live within a few miles of the city and yet in totally different conditions.[1] The remains of a large city extend over the foot-hills for a very considerable distance on both sides of the road to the Cilician Gates, and are evidently the remains of this second and higher Tarsus.

East of the Cicilian Gates the Taurus trends towards the north-east, retaining the same characteristics in even emphasized form up to and beyond the river Euphrates, which flows in a deep gorge through the mountains. Several very difficult tracks lead across this part of the Taurus from Sis in Cilicia to the region of Kaisari or to Hajin, which used to be an Armenian town of 2,000 houses in a deep hole in the Taurus, a flourishing industrial community. In the history of the kingdom of Lesser Armenia (i.e. Cilicia) for three centuries after 1140, those passes played an important rôle.

About three to four days' journey east of Kaisari,[2] a high mountain range (called in ancient times Anti-Taurus) diverges northwards from the Taurus range. This forms the eastern limit of the central Anatolian plain. On the north Anti-Taurus sinks into the high-lying plains of the Uzun-Yaila, now inhabited by Circassians (until forty years ago by Avshar, who were driven into the Anti-Taurus by the Circassian refugees), the

[1] The conditions, of course, were much better in ancient times, when what is now marsh was city and inland harbour; but they can never have been invigorating.

[2] Reckoned according to the old muleteers' way of estimating distances.

Uzun-Yaila forming the watershed between the Euphrates Valley and the Halys.

The Circassians of Uzun-Yaila form by far the largest section of the Circassian population of Turkey. They live, or used to live thirty years ago, mainly by horse-breeding, and large herds of horses roamed over the plains in the summer, but the Uzun-Yaila is too elevated a plateau for horses to inhabit in the winter, and the Circassians used to drive their horses down to winter in Cilicia. This gave the Government a hold over them, and in the course of a quarrel between these turbulent tribes and the Government, about thirty years ago, the Circassians of the Uzun-Yaila had to submit, when the Government refused to allow them to pasture their horses for the winter in the Cilician plain.

This great mountain region of the Anti-Taurus consists of two parallel ridges, running nearly north and south, separated by a deep narrow glen, through which flows the river Gök-Su[1] (Saros), and in which lies the ancient city of Komana on the right bank of the river. Of these two ridges the eastern is called Binboa-Dagh, which forms a continuous mountain, not traversed by any road and attaining a height of 9,000 to 10,000 ft. The ridge on the west of the Saros is not continuous, but is traversed by a series of passes with a summit level of 6,000 to 7,000 ft. There is no single name for this mountain ridge, because it is obviously divided by the passes into a series of separate parts. The names of all the parts are uncertain, but about the middle, on each side of the Quru-Bel, the traveller has on the north a mountain ridge called Soghanli-Dagh and on the south the Qizil-Göl-Dagh.

Seven well-marked passes, four on the north and three south, lead over the western ridge of Anti-Taurus ; they cross the mountain by deep glens (pass height about 6,000 feet). Three of these are specially important : (1) Yedi Oluk, by which the traffic from Sivas and Aziziyeh crosses to Hajin or to Guksun and Syria, a fairly easy path ; (2) Quru-Chai, by which the ancient trade from the west and the modern traffic

[1] This name, and not Seihun, is usual on the plateau.

from Kaisari goes eastwards: this is the best road over Anti-Taurus; (3) Gez-Bel, by which traffic goes between Kaisari and Hajin, a steep pass, but quite practicable for wheeled carriages.

East of Anti-Taurus is a great undulating country, reaching to the Euphrates on the east and to the Taurus on the south, divided between the basins of Euphrates and Jihan (Pyramos). The trade route goes north of Bimboa-Dagh to Gurun, Derende, Malatia, to the Euphrates. The Roman military road keeps to the south of Bimboa-Dagh to Guksun (Kokussos, Coxon of the First Crusade), and then turns north-east and east to Yarpuz (Arabissos), Albistan, Malatia, and the Euphrates lines. Both war and peace found paths across the eastern Taurus into Syria, leading from Guksun or from Albistan to Marash, or from Malatia by Pavrelü.

SECTION III

Access to the Plateau from the Sea[1]

References to ancient conditions are intentionally introduced, as these will revive, and must determine the future development of Anatolia, when prosperity returns.

(1) There are few roads from the west coast-lands to the central plateau, and only one furnished by nature which is good in itself, namely the line of the modern Ottoman Railway by the Maeander Valley to Dineir (Apameia-Celaenae) starting from the harbour at Smyrna. Political circumstances have denied to this railway its natural development, which had been planned in accordance with the nature of the route previous to 1889, but then the German banks [2] came into possession of the Anatolian Railway, which leads from the Bosphorus to

[1] The routes described are numbered in heavy type.

[2] Mainly, perhaps solely, the Deutsche Bank, which has built the Baghdad Railway with money borrowed in France through the Swiss banks (as direct dealing on the Bourse was forbidden by the French Government).

Ismid and has thence been extended to the plateau with the intention ultimately of reaching Baghdad. The German administrators in possession of this starting-point succeeded in thwarting the oft-repeated efforts of the Ottoman Railway to secure their right of extension to the east.[1]

Apart from this principal route from the coast to the inner plateau, the route which has been the most important 'trade route' across Anatolia from east to west throughout history, there are other subsidiary lines of access. These are (2) the line of the French Railway, *Smyrne–Cassaba et Prolongement* to Afion-Kara-Hisar, where it joins the German line. This railway was originally English, but lapsed to the Government, in accordance with a concession, somewhere about 1890 and was transferred to a company, mainly Belgian and French. It follows, roughly speaking, the ancient line of the 'Royal Road', a path of immemorial antiquity, leading from Sardis to Mesopotamia and to Persia; but the agreement in the line between this modern railway and the ancient route is not nearly so complete as the agreement between the Ottoman Railway and the ancient trade route. The comparative want of agreement is due to the fact that nature has not furnished a path which imposes itself alike on foot and horse passengers and on railways. Only in the section about twenty miles east of Ushak, leading up the valley of the Hamam-Su or Banaz-Chai, is agreement compulsory. Every one must ascend this steep glen to cross a broad ridge of the Phrygian Mountains running north and south.[2] There is here only one way, bordered on both sides by high mountains, Murad-Dagh (Dindymos) on the north-west and the central Phrygian Hills on the south-east.

[1] The extension of the Ottoman Railway to Egerdir, which has been recently completed, leads into a cul-de-sac, and was permitted on that account, and not from any desire to foster the real development of this British-owned railway. Yet the long and difficult continuation to Konia, passing west of Yalovach and east of Kereli, was being surveyed in 1914.

[2] It is really an elevated plateau rather than a ridge (height over 4,000 ft.). The slopes in wet weather are muddy and troublesome, but in dry weather there is no difficulty.

These are the only useful approaches from the western sea to the plateau. A traveller on foot can make his way up other paths, but they are extremely difficult and no traffic has ever gone over them. (3) One has some historic interest as a path for travellers, but not for trade; it ascends from the upper Kayster, and gets involved in the difficult south-west end of Banaz Ova, where the Maeander and its tributaries flow and meet in very deep cañons.

(4) The approach by land from the Hellespont to the central plateau is long and difficult. It follows the coast to Panderma and then crosses east of Mount Ida by low easy passes to the Kaikos and Hermos valleys. In the latter it joins the line of the French Railway, Route **2.**[1] This same pass east of Ida forms the best land line connecting Smyrna with Constantinople, and is now served by a railway and steamers, forming a service called by the imposing title of 'The Panderma Express', but the connexion is so poorly maintained and so slow that, even in point of time, the traveller saves much by taking the steamer the whole way round. This railway is a branch of the French line, going off at Magnesia via Soma and Balikesri to Panderma. Historically, this route has been of considerable importance. We hear little of it indeed until late mediaeval times, but it must always have been a route of importance. Both the Second and Third Crusades passed over it. The traveller from the Hellespont to the central plateau, instead of crossing the low pass east of Ida, might keep on straight eastwards near the coast by way of Brusa and so reach the line of Route **5,** some distance south of the lake of Sabandja; but the path is so difficult and so long that it is of no importance, except in so far as it coincides with the route from Constantinople by the line to Smyrna, which has just been mentioned.

[1] Estimated distance by the old roads: Chanak-Qalesi by Kara-jalar to Duman 31 miles, to Pasha-Köi 38, to Balia-Bazar 67, o Avshar 93, join Edremid road and cross river 102, Balikesri 107: hence the railway southwards. Balikesri to Edremid 56 miles (pass height of 1,150 ft. near Ivrindi, 20 miles).

Brusa, though a city of great historical, artistic, and commercial importance, is so remote from the main lines of communication and from other great centres, as to be wholly unsuited for an administrative centre for Asia Minor as a whole. It was the cradle of the Osmanli or Ottoman power.

The lines of access from the coast on the north of the plateau are extremely important, though none of them approach in natural ease the trade route on the west. (5) The first and most important of these is the line of the German Railway from Haidar Pasha by Ismid to Eski-Sheher (Dorylaion). This line leaves sea-level at Ismid, goes east some miles by the south side of the lake of Sabandja, then ascends the valley of the Sangarios and thereafter of its tributary, the Kara-Su, and comes down from the mountain rim on the plain in which Dorylaion lies. This has always been the main line of communication between Bithynia and Constantinople on the one hand and the central plateau on the other. It was the military road of the Byzantine system of defence against the Arab invasions, and in the view of the historian it has long completely overshadowed the two preceding roads. There is a side branch of this road, leading from the upper end of Kara-Su Valley direct south-west to Kutaya (Kotiaion), without touching Eski-Sheher; and the Anatolian Railway turns back south-west from Eski-Sheher to follow this route, passing near Kutaya (on a short branch line) and on to Afion-Kara-Hisar. This circuitous route is far preferable commercially, as it leads through more cultivated regions and touches the chief cities. It presents little difficulty to the engineer, and the watershed dividing the basin of the river of Kutaya and Eski-Sheher from the valley of Phrygia-Paroreios towards Afion-Kara-Hisar and onwards is low and barely perceptible, except when one watches the levels inscribed on the station buildings all along the German line.

Afion-Kara-Hisar (3,307 ft.[1]) lies in Phrygia-Paroreios, that

[1] Railway station height: the town is 40 to 100 ft. higher: so also at Aq-Sheher (below), the difference is 50 to 200. At Angora, it is more.

great valley and historical road-line (already mentioned in a previous Section) which is closed in by the Phrygian mountains on either hand, the level of the railway line sinking slowly until Aq-Sheher is reached (3,274 ft.) at the station below and east of the town. Thereafter the line slightly rises until it reaches the mean level of the central plain, about 3,300 ft. near Ilghin. Paroreios, therefore, presents a slight depression in the general plateau level and a considerable part of it is occupied by a series of marshy lakes, Eber-Göl, Aq-Sheher-Göl, &c., which are vast breeding-grounds for mosquitoes. The line of the Anatolian Railway has been laid out so as to take the fullest advantage of the lakes and the insects.

The direct connexion between Eski-Sheher and the East is maintained by the branch line to Angora (2,789 ft., on which see also Route **6**). This was intended in the original scheme of the Anatolian Railway to be the main line, but it was abandoned in favour of the superior strategic advantages offered by the road through Konia and the Cilician Gates to Adana and North Syria. The cession to German control of the old British railway from the Bosphorus to Ismid, about 1889, was strongly favoured by Sir William White, then ambassador in Constantinople, apparently under the impression that the line projected to Angora and the East would form a basis for German commercial interests in the eastern parts of Turkey and a barrier against Russia. Diplomatic conditions, however, soon showed that, to further their schemes in the East, it was advisable to fall in with and to encourage the desire of Sultan Abd-ul-Hamid to form a good road to the Holy Places of Arabia, hold on which was necessary to strengthening his position in the Mohammedan world as Khalif. Thus grew the grandiose plan of a great railway from the Bosphorus to North Syria, forking near Aleppo, on the one hand to Baghdad and the Persian Gulf, and on the other hand to Mecca, passing at a not remote distance from the Suez Canal and Egypt.

In planning the line from Eski-Sheher to Konia, the German engineers rejected the direct path from Eski-Sheher to Afion-

Kara-Hisar, because, in the first place, although quite feasible for a road, and carrying such a road in Roman and Byzantine times, it crosses a pass which is of considerable height and is steep and rough in access : in the second place, that path would neglect Kutaya, one of the chief centres for such trade as is maintained in the western part of the central plateau.

The same engineers also rightly left aside, as unworthy of consideration, the roads across the great central plain leading from Eski-Sheher either to Konia or direct to the pass of the Cilician Gates or to Aq-Serai (Archelais) and Cappadocia, which will be mentioned later. Although these roads offer a shorter line, they pass through a country which maintains only a scanty population of semi-nomads.

(6) The routes, which run between the two parallel ridges forming the northern rim of the plateau, have had great historical importance at certain periods (chiefly in the Mithridatic wars, and the wars of the Empire against the eastern Seljuk princes in the thirteenth and fourteenth centuries). They are, however, not to be compared in importance with the path and railway to Eski-Sheher—least of all are they comparable to it in the present time : see Section V. (4).

(7) The old trade road from Constantinople to Angora (Ancyra) diverges from Route 5 immediately south of Lake Sabanja and follows a rather difficult route, along which all the important trade between Angora and Constantinople has been carried on horseback for many centuries. This route began to come into use, so far as evidence goes, in the third century after Christ, when it was followed by numberless pilgrims who, during many centuries, came from Europe to visit the Holy Land.

(8) The road leading inland from Samsun (Amisos) has also been important in history and in trade, and a railway leading from the harbour at Samsun to Amasia, Sivas, and thence turning eastwards up the Qizil-Irmak (Halys) towards Armenia, has been projected for many years and formed the subject of much diplomatic discussion. A suitable and fairly easy route is presented in this direction.

The original scheme of the Anatolian Railway from the Bosphorus by Eski-Sheher to Angora and Sivas would coincide with this line from Sivas onwards.

(**9**) A still more important trade route has led up from Trebizond into Armenia and eastward to Central Asia. Fifty or sixty years ago, and for many centuries preceding, great caravans passed along this route in one direction or the other, and traders leaving Trebizond with goods for the East returned from Bokhara and Samarkand and even more distant markets, after 15 or 18 months, with the goods of Central Asia destined for the West.

(**10**) An unimportant and difficult horse-road leads south from Sinop. Yet it may in very early times have been much used, as Sinop was the harbour whence light Cappadocian trade was shipped to Greece. In modern times it can have no value, as Nos. **5**, **6**, and **7** present far better lines for railway connexion.

(**11**) On the south, the mountain rim which bounds the central plateau bears the general name of Mount Taurus (see p. 8). On this side, communication between the sea-coast and the plateau is generally very difficult, but there are several roads which have historical significance. The roads which lead up from Adalia (Attalia) on the Pamphylian coast have always enjoyed a certain importance. The Taurus in this part is very low, and much broken by glens and lakes. The principal road leads to Denizli (close to Laodicea) and the Maeander Valley. Here it joins the trade route (No. **1**). The Second Crusade came down from Denizli by this path, seeking thereafter to reach Cyprus and Syria by sea, and this way of communication had a certain importance in former times.

These roads in ascending from the Pamphylian coast valley (on which see p. 24) have to make a step of more than 2,000 feet, very steep, to the outer edge of the Taurus plateau. The easiest pass is Yenije-Boghaz, 16 miles from Adalia, leading on to Istanoz (Isinda, 3,000 ft.), thence by Salamurt Boghaz (summit-level 4,800 ft. at 58 miles), and to Tefenni

(3,600 ft.), 80 miles, and straight north by Kara-atli, 98 miles (3,750 ft.), to Chardak, 123 miles (on the Ottoman Railway, 2,800 ft.), and Aghlankŏi, 151 miles (2,600 ft.), and Deli-Heuderli, 167 miles (2,750 ft.), to Ushak, 190 miles (3,100 ft.): before reaching Ushak, the deep gorges of the middle course of the Maeander must be crossed. North of Tefenni this is not a natural route, but merely a passage from one part of the country to another cutting athwart all routes.

Other routes from the Pamphylian coastlands to the plateau are tedious and difficult. There is an Italian project for a railway from Adalia to Isbarta via Buldur, connecting there with a branch of the Ottoman Railway. Political reasons led to the choice of such a line for a railway, which presents serious difficulties to the engineer. It was generally understood that this concession was granted in 1913, but no work has ever been done on the line.

(12) No reasonable line for a railway connecting Konia (Iconium) with Alaya or any other Pamphylian harbour can be found. A horse-road was used or made by Ala-ed-din connecting his great harbour of Alaya with Konia via Bey-Sheher; but it is very rough.

The first manager of the Ottoman Railway was anxious to find a feasible railway route, because, as he said, goods from the Konia region would not bear the cost of the long transport by land along the Ottoman Railway to Smyrna. It was the dread of this prohibitive cost which prevented him from undertaking that section of the Ottoman Railway in 1887, when the concession for it was offered to him. But no useful route from Konia to the Levant and the Pamphylian Sea exists, except on the following line (which is too long and difficult to offer any advantages to a railway conducted on commercial principles, as the British Ottoman Railway was).

(13) South of Karaman (Laranda), which lies in a deep angle of the Taurus, the mountains are lower and more broken around the upper rims of the Gök-Su (Kalykadnos). From Karaman, several tracks lead across to Ermenek, 3,800 ft., in a deep gorge of the Taurus, and to Selefke (Seleu-

keia) which lies on the low coast-lands, a little way back from the sea, at the lower end of the Gök-Su. Said Pasha, who governed the Konia province for many years from 1879 onwards, made a road passable by wagons from Karaman to Selefke. In Roman times, about 200 years after Christ, a road was constructed to Karaman and Korghos (Korykos), about 15 miles east of Selefke. It is narrow, just barely broad enough for a wagon, and has been traced only for a few miles near the southern end. Several tracks across the Taurus in this part lead to Karaman or to Eregli, both stations on the Baghdad Railway. They are necessarily difficult on account of the character of the country, but at least one of them (apart from Said Pasha's road) is quite susceptible of being made into a useful road if there were anything to gain thereby. It crosses the Taurus from Maghra on Said Pasha's road to Eregli over a high plateau, 6,000 to 7,000 ft.

(**14**) The tracks in this region pass beside the high-lying *Yailas* of the nomad Yuruks at various points, and two or more similar paths cross from the western end of the Cilician plain about Tarsus and Pompeiopolis or Mersina, ascending by branches of the Nemrun river and coming down on Eregli.

(**15**) All these roads are of quite secondary importance in comparison with the great historic route for armies and for trade which takes its name from the Cilician Gates, a single point on its course. A considerable amount of rock-cutting was needed to make this road. The ancient chisel-work is easily distinguished from the more expeditious, but less beautiful, blasting used by the moderns. We hear of this route as the usual wagon way about 400 B.C., but it is certainly much older. It was, apparently, destroyed completely as a wagon-road during the Arab wars, and remained in use only as a horse-road for many centuries, but it was remade for wheel traffic in the years following 1880, though in very poor fashion.

This road follows the line of a little stream which flows down from the high *Yaila* beside Ulu-Kishla, the most

westerly river that has a practically continuous course as a river from the central plateau through the Taurus to the sea. The rivers west of the Cicilian Gates that flow into the Levant from Taurus rise in, or on the southern declivities of, Taurus, though several seem to be connected by underground passages or *Duden* (Katabothra) with lakes or rivers on the plateau; but from the Cilician Gates eastward there is a series of rivers which rise on the plateau and flow through the Taurus to the sea. Those rivers are: the Zamanti-Su (Karmalas), the Seihun (Saros), and the Jihan (Pyramos). The Zamanti-Su joins the Seihun in the heart of the Taurus. These three rivers wind in deep gorges through the Taurus, and the scenery of the gorges is described as wonderfully magnificent. They are, however, of very slight importance for travellers and of none for traffic.

The only river which offers a useful course for a roadway through the Taurus is the one that we are describing, which rises near Ulu-Kishla. It is called either the Ulu-Kishla Water or the Bozanti Water. Rising right on the highest *Yaila* of this neighbourhood, nearly 5,000 ft. above the sea, it flows through the Vale of Loulon, then in a narrow cañon by Chifte Khan and a more open glen by Takhta-Köpru (wooden bridge) and Aq-Köpru to the Vale of Bozanti, an oval small valley in the heart of the Taurus. This vale was known in ancient times as the Camp of Cyrus, or by the local name Podandos. Between this vale and the open Cilician Valley there runs the outer ridge of Taurus, from north-east to south-west, and the river penetrates by a very narrow gorge into this ridge, degenerating at last into a tunnel under the mountain (as is reported). The road cannot follow the stream south from Bozanti,[1] which is about 2,800 ft. above sea-level, but turns south-west and ascends the ridge of Taurus, crossing it by a broad level open pass, which was defended formerly by a series of forts, called Ibrahim Pasha's Lines (built by Ibrahim, son of Mehemet Ali of Egypt, when

[1] A well-constructed road has recently been built from this point over the mountains towards Adana, along the line of the railway.

he invaded Asia Minor in 1836 with the intention of dethroning the Ottoman Sultan). This crossing is about 4,350 ft. above the sea. From it the road descends 500 ft. to the Cilician Gates and continues over the rough foot-hills towards the plain, on which it emerges about five miles north of Tarsus. A branch of this road diverges to the left, a little way south of the Gates, leading to Adana, the capital of the province; but this is only a horse-road, whereas the whole line of the road to Tarsus has been in recent years made into a very fair road. When crossed in a wagon in 1909 it was found good the whole way. The time for each kilometre varied between five and ten minutes, according to the gradient.

Even in this case the road cannot follow the river valley the whole way. Rarely does the road follow the river valley, because all the rivers flow through more or less impracticable gorges. The railway can follow the Maeander and Sangarios and Hermus only for a short distance.

The road which is called after the Cilician Gates forms the line of the Baghdad Railway from Eregli in the plateau by Ulu-Kishla as far as Bozanti. Thereafter the railway is to follow the line of the river all the way to Adana, penetrating the outer Taurus ridge by a series of galleries culminating in a great tunnel seven kilometres in length.[1]

SECTION IV

Main and Local Roads

(1) *Roads crossing Anatolia east and west*

The roads in Asia Minor belong to two categories. In the first place there are the roads which are required for internal administration; in the second place there are the roads which

[1] This part of the Baghdad Railway is complete except for the section between Karapunar and Dorak. This section will take a year or more to complete, and at present communication is maintained by the road referred to in the foot-note on page 40.

form part of the world's system of communication. Asia Minor is a bridge between Asia and Europe, and from time immemorial it has been crossed by roads whose purpose is not to help in the administration of the country, but to lead from points farther east in Asia to points farther west in Europe. These two classes of roads frequently merge in one another; that is to say, a road between two points may at the same time serve in the one category and in the other. It may be important for internal communication and for governmental administration, and at the same time it may be part of the general system of communication between farther Asia and Europe. These two classes of roads have to be briefly described apart from one another.

The administrative road system of Anatolia (i.e. Asia Minor north of the Taurus) is determined by the situation of the capital and seat of government. Since Constantinople became the governing centre, in A. D. 330, the main purpose of the roads has been to maintain connexion from the Bosphorus to Asia Minor, Syria, Mesopotamia, and in part to Egypt, Armenia, and Central Asia. Naturally, heavy merchandise to these last-mentioned regions would go by sea, even in the period of sailing-ships, but the introduction of steamers, with their regular departure and arrival, greatly modified the conditions of travel and trade. As a remarkable example of the new system, the instance may be mentioned of a member of the Turkish Parliament, who was starting from Constantinople for Baghdad in 1913, and, in reply to a question how he intended to perform the journey, stated that the quickest and best road for his purpose was via Bombay. Other modifications in the lines of traffic are easily imagined.

Before the foundation of Constantinople as the imperial city, the aim was to reach the western capital, namely Rome, or to carry from Rome orders and armies, trade and officials to the East. Before the dominion of Rome began in the East, the aim of these world roads was to mediate between East and West, the Asian and the European capitals for the time being.

In the present conditions of communication and installation,

the administrative inland centre of Anatolia would probably be at Eski-Sheher (Dorylaion), which is situated at the fork of the two great railway lines, viz. the Baghdad Railway via Konia and Eregli, and the Angora Railway (which must be continued via Yozgat to Sivas and Erzerum). Other places hardly deserve consideration. Brusa was the cradle and early centre of the Ottoman power, but is disqualified by lying so far from all the lines of communication: it is in a corner of the Empire, and derived its importance from the accidents of a passing phase of history. Konia, the capital of the Seljuk Turks, has more claim; but it is not, and never can be, a great centre of meeting lines. Angora, Kaisari, Sivas, are all important centres, but the last two are remote from all railways, and the first is the terminus of what for the present must be called a branch line, though, after the changes that must come have come, it will be far more important than at present. Smyrna is the only possible point of connexion with the West: it has always been the dominating railway head and centre, and it is in close communication with Europe, possessing a safe and good harbour, where the railways deliver to the ships. Under the Hittite Empire the capital was at Boghaz Köi (Pteria), 5 hours from Yozgat. At all other times Asia Minor has belonged to a foreign race, and looked to a capital outside itself.

During all that earlier period the chief harbours for the West were in succession, Miletus, at the mouth of the Maeander (until access to the harbour was impeded by the gradual silting up of the estuary); then Ephesus, at the mouth of the Kuchuk Menderez (Kayster), until for the same reason it ceased to be accessible to sea-borne traffic; and finally, Smyrna, whose importance has always been great from the earliest to the latest period of history. During the period of decay of the Turkish Empire, which lasted until between 1880 and 1890,[1] Constantinople was far more important as an official

[1] A distinct attempt at renovation and reconstruction began then. Many nomads were forced to settle down: some were subdued for the first time. The attempt was unpractical and unsuccessful, but it is useful to study.

city than as an emporium for trade, and the roads which led to Smyrna still carried the greatest part of the merchandise which crossed Asia Minor. Hence, when railways began to be built in Turkey by British companies, whose purpose was trade, they started from Smyrna as the important harbour of Turkey, and aimed at finding the best route direct towards the East, one taking one and one the other of the two ancient routes of access from the west coast to the central plateau (Section III, Routes **1** and **2**).

There was an interesting attempt made not many years ago, at least in intention, to revive the old historic importance of Miletus. A scheme was formed by some European financiers, mainly Belgian, to regulate the course of the Maeander and form a harbour, a little way above its mouth, readily accessible to the sea. The scheme, naturally, was vehemently opposed by all the interests in Smyrna, and for that and other reasons it failed even to make a beginning. Again, a shadow of the old importance of Ephesus as the harbour for eastern trade was maintained at Scala Nova, a little way south of the mouth of the Kuchuk Menderez ; but the Ottoman Railway established the monopoly of Smyrna, and destroyed the value of Scala Nova, which was five hours distant from the station and necessitated reloading of all goods on camels, while Smyrna was only three hours distant by rail. Moreover, Scala Nova was only an open roadstead, while Smyrna offered superior advantages. Still, circumstances may at some time restore some importance to those neglected ports.

The roads which belong to international and world communication enter on the plateau by one of the lines of access already described, namely, Nos. **1**, **2** and **5** in Section III, coming from Europe either by way of the Bosphorus and Constantinople or by one of the harbours on the west coast. These roads traverse the plateau from west to east and pass off by one or other of several well-marked lines. The first of these is the historic pass of the Cilician Gates, which leads to central and southern Syria, to Egypt and Arabia, and also to Mesopotamia. The second is the line of the Roman trade route,

the western part of which is described in Section III, Route 1. The third goes up the Halys by Sivas towards Erzerum.

(1) On the road through the Cilician Gates, see p. 39.

(2) The trade route, after reaching the depression in which the Maeander rises at Dineir (2,850 ft.), ascends a steep ridge of 500 ft. in height, and is then on the rim of the central plateau. It continues along several open long glens, especially Chöl-Ovasi and Oinan-Ova and Karamyk Ova, for about 73 miles through the Phrygian mountain region till it comes near Chai, a station on the German Anatolian Railway. Here it makes a rather sharp descent of 300 to 400 ft., which is simply the edge of a plateau elevated above the level of the great valley of Phrygia-Paroreios (Section I).

This valley is the axis of communication in the western part of the central plateau. Many roads traverse it, some throughout its entire length, others, as for example this one, entering it at some point in its length and continuing to traverse it. The line of the Roman trade route coincides with the line of the Baghdad Railway[1] from Chai (Julia-Ipsos) to Serai-Ini beside Ladik in Lycaonia (apart from the railway detour between Ak-Sheher and Ilghin). At this point the Baghdad Railway diverges to the south and south-west across the Boz-Dagh to Konia, while the trade route continues straight on to the east. It is now on the level plain (3,300 ft.), and wagons in summer-time can run in any direction. Any Turkish wagoner will take a line which chances to suit his own taste. He may have a wife and family at some village in the plain, and he takes the opportunity of paying a passing visit to the village. But, if there is no special temptation, most wagoners would go through Suwerik and Sultan-Khan (in the latter there is an excellent supply of water) to Aq-Serai (Archelais). Here all roads from west, north-west (Eski-Sheher and Angora), and south-west (Konia) meet and continue in much the same line

[1] This name is not technically accurate. The railway as far as Konia is the Anatolian ; after Konia it is the Baghdad Railway ; these sections are financially separate, but are worked under the same supreme management and belong to the same owners.

to Nev-Sheher, Indjesu and Kaisari. Suwerik (Psebila, near Verinopolis) on this road was important in ancient times and in the Middle Ages. So long as the commerce from the East continued to go to Smyrna it retained this importance. It is now a wretched village, with some few traces of its greatness in early Turkish times. Here the road from Angora to Konia crosses the trade route; here other minor roads meet; and here the 'Syrian Road' goes off by Genne (Kanna), Kara-Bunar (Hyde probably) to Eregli and the Cilician Gates. It may revive, if prosperity returns to Asia.

Kaisari is the great trade centre of the eastern part of the central plain, and a meeting-place of roads from all quarters, which diverge again in different directions. The trade route goes on to cross the Anti-Taurus, three days' journey away. There can be no doubt which of the seven passes over Anti-Taurus was used by the trade route. This was the pass of Quru-Chai, leading on to the Euphrates, and taking a line as nearly east as possible through Gurun (Gauraina) and Derende (Dalanda) and Malatia (Melitene).

(3) On the north, the exit to the east from the central plateau is by way of Sivas and up the valley of the Halys to Erzingian and Erzerum. This also has been an important route throughout history. There has been a great scheme promoted by a syndicate of French and Belgian capitalists, and strongly supported by the French Government, to secure the concession for a railway along this line. The concession had been sought by many groups, including one large and important American oil group. In the early part of the year 1914 it appeared as if the Franco-Belgian group had been successful. This route would naturally connect with Angora, Eski-Sheher, and the Bosphorus.

These three routes form the doors leading from Asia Minor proper to the main continent of Asia. They are indicated by nature, and nothing can interfere with their pre-eminence as ways of communication. Methods of travel, horse or wagon or railway, change, but these remain.

There are thus two lines of railway which traverse Asia

Minor, either in plan or in execution, and form part of the general Asiatic system of communication. A third line for a railway used to be spoken about, but seems to have passed out of the region of practical discussion. This road was intended to cross the eastern Taurus, coming from Angora and the west and passing through Kaisari, and crossing the Anti-Taurus by the same pass of Quru-Chai (see above) as the great trade route just described. It then diverged towards the south and had before it a choice of difficult routes across the mountains of the Eastern Taurus. An officer of engineers who had traversed all the passes across the Eastern Taurus used to assert as long ago as 1881 that, if ever a railway should cross the Taurus in this region, it would go by the pass leading from Yarpuz (Arabissos) and Albistan to Marash (Germanikeia), on the southern edge of the Taurus, one of the important cities of Northern Syria.

(2) *Roads on the Central Plain of the Plateau*

As has been mentioned, the roads across the central plain, although in summer time perfectly easy to traverse, so far as the going is concerned, present difficulties to large parties on account of the scanty supply of water and food for the horses. Hence the Byzantine military road from the Bosphorus by Eski-Sheher to the east and south-east did not cross the central plain,[1] but kept to the hilly country on the north or to the western and southern edge. But these roads across the plain are useful for commercial purposes and for small parties of travellers. Moreover, there are a certain number of large and abundant fountains of fresh water which rise in the plain: see Section I (4).

In 1883, in the northern part of the plain, within about 50 miles south-east from Eski-Sheher, a broad series of deep ruts, marking some definite road, was observed at various points. These wheel-marks, which evidently pointed to a considerable

[1] Professor Gelzer of Jena maintained that this great road for armies crossed the plain, and Professor Bury of Cambridge has championed his opinion.

amount of intercourse by wagon, were stated to mark the 'Araba Road' from Eski-Sheher to Konia. This road was described as crossing Emir Dagh by a low pass at Piribeili, entering Paroreios east of Aq-Sheher and the lakes, and there joining the great trade route by Ilghin and Ladik, across the Boz-Dagh.[1]

The ordinary definition of a wagon-road (*Araba-Yol*) is that it is easier and longer than the horse-road, but here, apparently, there was a wagon-road which was distinctly shorter than the corresponding horse-road. Further, although this road is so much shorter and evidently easier than any of the paths which lead from Eski-Sheher to Konia across the Northern Phrygian mountains, yet there is only very slight evidence that any military operations were ever conducted on its course, whereas the way through Paroreios has throughout the centuries formed the route for armies marching in either direction. Only when one comes down to the Arab period, one finds, in the eighth and ninth centuries, some allusions which indicate that this road was known to the Arab geographers, especially the soldier, Ibn-Khordadhbeh. The only way in which roads across Asia Minor became known to the Arabs was because they were used in their raids, repeated year after year and decade after decade. It was, therefore, possible for the light moving squadrons of Arab cavalry, which made the raids, to use roads across the plain; and while it is difficult to disentangle the vague allusions made to those wars, yet it is clear that the Arabs were able to employ these paths to attack the Byzantine Empire, probably preferring them because they had not previously been guarded. Hence it became necessary for the Byzantine Emperors to guard those hitherto undefended lines of attack.[2] The defence was chiefly by means of castles perched on the high conical hills which are scattered here and there over the whole country.

Later observation revealed no reason why that Araba Road should not have continued on the eastern side of Emir-Dagh

[1] Like several other roads, it ceased to be used when the railway was built.

[2] See Section V.

in the plain right on to Ladiq, and so to Konia. That is the line of the drovers' road : see Section I (4). More thorough exploration of the great central plain showed that there was, evidently, a Roman road marked by milestones, which led from Angora direct to Konia, crossing Boz-Dagh by the pass of Egri-Baiyat. There is no difficulty along the whole course of this road, so far as the crossing either of hills or of streams is concerned.

This same pass serves equally as a connecting link in a very tempting route direct from Eski-Sheher to Eregli, going east of Kara Dagh and west and south of the Aq Göl (White Lake) west of Eregli.[1]

Further there is still a third route from Eski-Sheher, passing to the left of Boz-Dagh through Kara Bunar and so on to Eregli, but this road has to cross the river, with its marshy surroundings, which flows from the Plain of Nigde into the Aq Göl.[1] There is a causeway and bridge of the terrible old Turkish type across the river on this road, and the same causeway serves for the shorter road from Konia to Eregli by Kara Bunar. This route crosses at Suwerik both the great trade route and the road from Konia to Angora. Suwerik was, therefore, in former times an important meeting-place of roads, until in the last stage of Turkish degeneration it sank from being a city (ancient Psebila) to a ruinous village.

The fourth road leads south-east from Eski-Sheher by or near Sultan Khan, and so through Aq-Serai (Archelais), keeping north of Hassan Dagh, either on the one hand to Kaisari or on the other hand round the east side of the great mountain by a rather circuitous route to the plain of Nigde and the Cilician Gates.

The problem has always been to determine why these roads, which in summer are so easy, have played so little part in history or in trade communication. The reason must lie in the difficulties already described in respect of the water and food supply, and mud in the wet season. The dry

[1] Different from Aq-Göl, mentioned in Section I (4).

season lasts frequently for five or six months continuously, but at the beginning and the end rain may fall at any time and make the crossing of the plain impossible for wagons and troublesome for horsemen. Only on the two Roman roads—one north and south connecting Angora with Konia; the other the eastern trade route, leading from Aq-Sheher and Ladiq to Aq-Serai and Kaisari—is there any probability that there was ever a properly constructed roadway which would make the crossing of the plain possible even in the wet season. These two roads intersect one another at Suwerik (Psebila : see above).

After the conquest of the central plateau by the Turks about 1070, a new difficulty was introduced. These great plains were occupied by the nomads from Central Asia, who pass under the name of Turkmen, and are so called even by Byzantine historians in the twelfth and thirteenth centuries. Afterwards there were added to them various tribes of Kurds, who occupied the northern region, especially the hill country of Haimane south and south-west of Angora, and extended beyond into the level plain on the south and south-east. Finally, there were considerable bodies of Yuruks. These all regarded merchants as their natural prey, and scrutinized with suspicious eyes any traveller who came without proper safe-conduct from their own friends. The Seljuk Sultans of Konia, during the first two and a half centuries of the Turkish period, built a series of khans along the principal roads, which obviously were intended quite as much for the defence of trading parties as for their mere convenience. Their high walls, corner towers, and fortified gateway enclosed a considerable space and formed a sufficient fortress to defend any party against attacks by the nomads.

While these roads across the plain present the disadvantages which have been enumerated, yet during the dry season they are all easily traversed, and for parties using motor-cars, and able to traverse considerable distances at a time, they present excellent opportunities. There are a few points here and there where some difficulties would be encountered, but none

of these difficulties is such that it could not be done away with and the road opened to motor traffic with light work by a few trained men: only it would always be necessary to avoid falling into such a difficulty as the Ala-Dagh, already described, or coming athwart one of the small canyons which run down towards the Sangarios river.

SECTION V

Old Military Operations

The military operations of past history are instructive, because they have been guided by the same practical conditions of communication and water-supply which still rule. They differ, however, in two respects from modern operations: (1) They were almost wholly confined to the season of fine weather. Ancient armies usually went into winter-quarters, and waited till the following spring; and purely citizen armies also were sometimes with difficulty prevented from going home for the important agricultural seasons. Once in the third century B.C. the army of a Greek king attempted to cross Taurus from Cilicia to the central plateau in winter, and was overwhelmed by snow: this must have been an untimely and unexpected snowstorm, either very early or very late. (2) The armies were small in numbers, with the exception of the numerous forces of the Persian kings. The operation of leading the great army of Xerxes in 481 B.C. across the plateau of Asia Minor must have involved preparation on a large scale, and shows what can be done in a region where water is so scarce. His line of march across the central plateau between Cappadocia and Dineir (Apameia-Celaenae) is unknown, but the water-supply must have been the determining factor; the country was cultivated and populous, and food was collected along the route as previously arranged. Doubtless the soldiers marched in smaller armies successively (though untrustworthy Greek

records speak of one army of a million, or millions, marching and subsisting as a single body of troops).

These two conditions of season and numbers would facilitate ancient operations. The marches were made in the dry season, and those hardy Orientals can go with little and simple food.

Early Wars

Early wars are obscure in details. Croesus marched from Sardis perhaps by the Royal Road (Route **2** in Section III), when he crossed the Halys and destroyed a great empire, and Cyrus doubtless followed up the defeated army and marched on Sardis by the same road. Xerxes in the latter part of his advance towards Europe used Routes **1** and **3**, by Dineir, Philadelphia, and the Dardanelles. The *Anabasis* of Xenophon describes the march of Cyrus the Younger from Sardis by Philadelphia to join the great trade route: the army went up to Dineir (Apameia-Celaenae), but then turned away sharp to the north-west, and then north to join the Royal Road as far as Afion-Kara-Hisar, and thence along Paroreios to Ilghin, Konia, Karaman, Tyana, and the Cilician Gates. The object of that retrograde movement from Dineir was to prevent suspicion as to the real purpose of his expedition: he pretended to be making a progress through his own satrapy, and having thus tried to lull suspicion he resumed his eastern march by another route. His friend the Queen of Cilicia joined him near Chai, accompanied him to Karaman, and then crossed Taurus by the Dumbelek Pass to Tarsus with her Cilician escort. The march of Cyrus has considerable analogies to, and differences from, that of Xerxes.

The campaign of A. D. 301 is instructive. Antigonus lay for the preceding winter at Dineir (Apameia-Celaenae). His opponents were Lysimachus coming from Thrace and Seleucus from Syria, singly quite unfit to match his power, but stronger than he, if united. In the spring Antigonus moved up the central trade route to Chai in order to throw himself between his enemies, who would march along the valley of Paroreios

from opposite quarters and meet in the plain near Chai. He advanced too late; when he came near Chai he found that Lysimachus and Seleucus had joined forces; and the decisive battle took place in the plain at Ipsus beside Chai. Apparently all the movements on each side were normal, and were expected by the other; but Antigonus expected his enemies to wait for the usual season before beginning operations, whereas they began earlier, and were probably favoured by early hardening of the roads, so that they were not impeded by mud, and thus arrived sooner than Antigonus calculated.

Various old military operations on the north side of the plateau moved along the lines running east and west between the double lines of the mountain rim (see Sections I (1); III, **6**; a formation special to that side of the main plateau). The chief route is that which runs east from Boli and down the valley of the Gök-Irmaq (Amnias) by Tash-Köpru (Pompeiopolis), across the Halys by Vezir-Köpru to Amasia and Niksar. The rise of the Pontic kings, especially Mithridates, made this line very important in the second and first centuries B.C.; and Pompey founded the city which bore his name in order to guard the route. There was also a route by Boli and Changri (Gangra) or Tossia (Dokeia), which is most conspicuous in the wars of the Seljuk Turkish princes of the north against the Byzantine emperors of the twelfth to the fourteenth centuries. Both roads, however, have always their own importance in every period of history.

Roman Defences

The Roman defences on the east are better known; they consisted chiefly in a line of military stations along the Euphrates connected by a military road. This line was approached by the two great routes from the west, that of Sivas and the Halys (Route **8**) leading to the great military camp at Satala, where the XVth Legion (with auxiliary troops) was stationed, and the central trade route (1) leading to Malatia

(Melitene, where Legion XII was stationed). A cross-road from Yarpuz (Arabissos) to Sivas completed the system, which was devised to guard against the attacks of a fairly civilized and organized enemy, the Parthians of Mesopotamia and Persia. The Romans maintained few other troops in Asia Minor, only a few auxiliaries, who acted rather as police than as soldiers (for the Romans never had any proper police force). The defence of this frontier was conducted more from Syria than from Asia Minor, and any additional troops required to operate in Armenia and towards the 'Caspian Gates' were landed at a Syrian harbour. There were therefore few military operations across Asia Minor under the Empire, until the growing disorganization and weakness of government, and the helplessness of a civilian population accustomed to rely wholly on the protection of a small professional army, exposed the country to inroads from Central Asia. Civilization nursed in comfort and unused to defend itself was helpless before these attacks.

The constant danger due to the pressure of barbarous Asiatic tribes on the eastern frontier of the Roman or Byzantine Empire from the third century onwards, and their incursions during times of Imperial weakness, when they ravaged the whole of Asia Minor to the west coast, led gradually to the reorganization of the defences in a form similar to, yet different from, the Roman system. The Roman plan of military roads continued; these were simply the administrative roads improved and defended by forts or fortified cities, with attention to the provisioning of marching armies (which sometimes necessitated slight changes of line, in order to touch the great fountains, where encampments could be made). This defensive system can be traced back probably to Justinian I (A.D. 527–63), because two important cities on the lines of road bear his name, Justinianopolis; but it was modified and improved, especially by the Iconoclast emperors and by the Macedonian dynasty, whose defensive invention was stimulated through the necessity imposed by annual Arab attacks between A.D. 660 and 960.

The Arabs and the Byzantine Empire

The long wars between the Arabs and the Byzantine Empire (except in the few attempts made by sea, culminating in the two great sieges of Constantinople, 668 and 716) were waged along the recognized lines from and to Baghdad. The Arabs held Malatia for a long time, advancing to it either across the eastern Taurus by Marash (Germanikeia) or across the Euphrates along the eastern trade route (see p. 31). Cilicia was held by them for three centuries until Nicephorus reconquered it about 960; and Tarsus became a centre of their military strength. Harun-er-Rashid refortified Tarsus about 800. The story of the castle of black marble and the lake peopled by transformed fishes of four colours, the four religions of the inhabitants of an enchanted city, which is told near the beginning of the *Arabian Nights*, has its scene along the road of the Cilician Gates between Tarsus and Tyana, and is a fanciful distortion of real journeys and military raids.

The Arabs usually advanced in large armies across this pass, and the defence centred on the castle of Loulon at the northern end, east of Ulu Kishla. So long as this castle was held by the Romans, early news of Saracen invasions was flashed to Constantinople by a line of beacon fires; and the garrison of the castle was a thorn in the side of the invading army. The castle changed owners several times, being captured and recaptured. New frontier strategy was developed during the wars. Amorion became an important military centre, which implies that invasions were often made along the roads that cross the central plains (see Section IV, 2). These had to be met by corresponding operations along the same lines by the Byzantine troops, and the march of Constantine, 791, by Anhydroi Pyrgoi (Waterless Towers) indicates the character of the country traversed. Castles were built on points commanding the plains of the central plateau. The many volcanic peaks which protrude through the

limestone plateau offered situations for garrison defence which suited the special needs of that period. Those Arab raiders were very dangerous in unexpected assaults ; they appeared with lightning speed, for most raids were made with horsemen only ; but, if they failed to carry a city or fortress by a sudden attack, the Arabs were unskilled in, and not provided for, siege operations. Thus those castles on high peaks difficult to climb were the form of defence on which the Byzantine troops relied ; but they had the great disadvantage of being incapable of withstanding a blockade, because they could not be sufficiently supplied with water ; such water as was stored during the rains in the large cisterns could hardly be sufficient to last till the next season's rains came to refill them. The supply of food also constituted a difficulty in the defence. Still the advantages were so great that all the many known garrison defences constructed during this period are of the same class.

The light Arab troops also developed a system of attack across the other Taurus passes, which required a system of defence under the direction of the Kleisourarch, commander of the Kleisourai (passes) of the Taurus, and of the general in command of the Anatolic Thema, i. e. the troops garrisoning the country from Eski-Sheher on the north to Yalovach, Konia, and Karaman (Laranda). The details recorded about the actual raids are so scanty as to give little conception of the importance of the eastern Taurus passes in those wars ; but the treatise on Nicephorus' frontier warfare shows that every pass from Selefke (Seleukeia) on the west to Malatia on the east was a weak point where attack might be expected, including even the difficult tracks over Taurus from Sis and East Cilicia generally to the country south of Kaisari.

After the Arab wars were ended by the reconquest of the debatable land and the enlargement of Byzantine power and territory, A. D. 960, invasions by the barbarian tribes of Central Asia, of Turkish stock, came along one of the three routes described in Section III (p. 31). The Seljuk Turks and the Mongols came by Sivas, which became one of the

brilliant Seljuk capitals. The Mongol capture and sack of Sivas remains one of the horrors of history, hidden fortunately in the obscurity of the arid pages of a Byzantine historian. From Sivas Tamerlane advanced to Angora by the road described above, and destroyed for a time the rising power of the Ottoman Turks under Bayazid in the battle near that city (A. D. 1401).

The First Three Crusades

The first three Crusades chose the land route from central or western Europe to the Holy Land. The first, in A. D. 1099, crossed the Bosphorus, and went up by the line of the railway (Route **5** in Section III). The crusaders diverged for the moment to capture Nicaea, which had been captured by the Seljuk Turks ; but returned to the main route (as no other existed). They fought a great battle where the road descends from the mountain rim into the plain a few miles north-west of Eski-Sheher (Dorylaion). Their subsequent marches were ill-directed and sporadic. Some of them appeared at Yalovach (Antioch, the Pisidian) ; some crossed by the pass of the Cilician Gates ; some reached Guksun (Cocussos) beyond the Anti-Taurus. They had no knowledge of Anatolian topography ; and they were intentionally misled by Greek guides supplied by the treacherous Byzantine Emperor Alexius. Moreover, they could not as a single undivided army find food in sufficient quantity in a country which had already suffered for 130 years from Turkish rule.

The Second Crusade marched in two divisions (A. D. 1146). The Germans under Conrad attempted to ascend the modern railway line (like the preceding crusaders) ; but they were almost annihilated by the Turks. The French, under many princes of the west from Aquitaine and Provence to Belgium, marched along Route **3** (Section III), and then by Ephesus and up the Maeander valley. Their crossing of that river in the face of the Turkish army assembled on the opposite bank was one of the most brilliant feats in history ; it was made ' where ford there was none '. In the narrow pass just above

Denizli on the road to Adalia, they were nearly defeated by the Turks; but they forced a passage at heavy cost, and found their way to Adalia and so by ship to Palestine.

The Wars of the Comneni

The wars of the Comneni against the Seljuk Turks in the eleventh and twelfth centuries were fought in the western part of the plateau, which had passed almost entirely into Moslem hands in A. D. 1071–4. Alexius advanced towards Konia, but turned to retreat a few miles south-east of Aq-Sheher, and at last won a victory, or at least saved his retreat from becoming a rout, in a battle fought in the plain five or six miles east of Afion-Kara-Hisar. The whole of this campaign was fought along the Paroreios valley, and Alexius must have advanced from Eski-Sheher (Dorylaion).

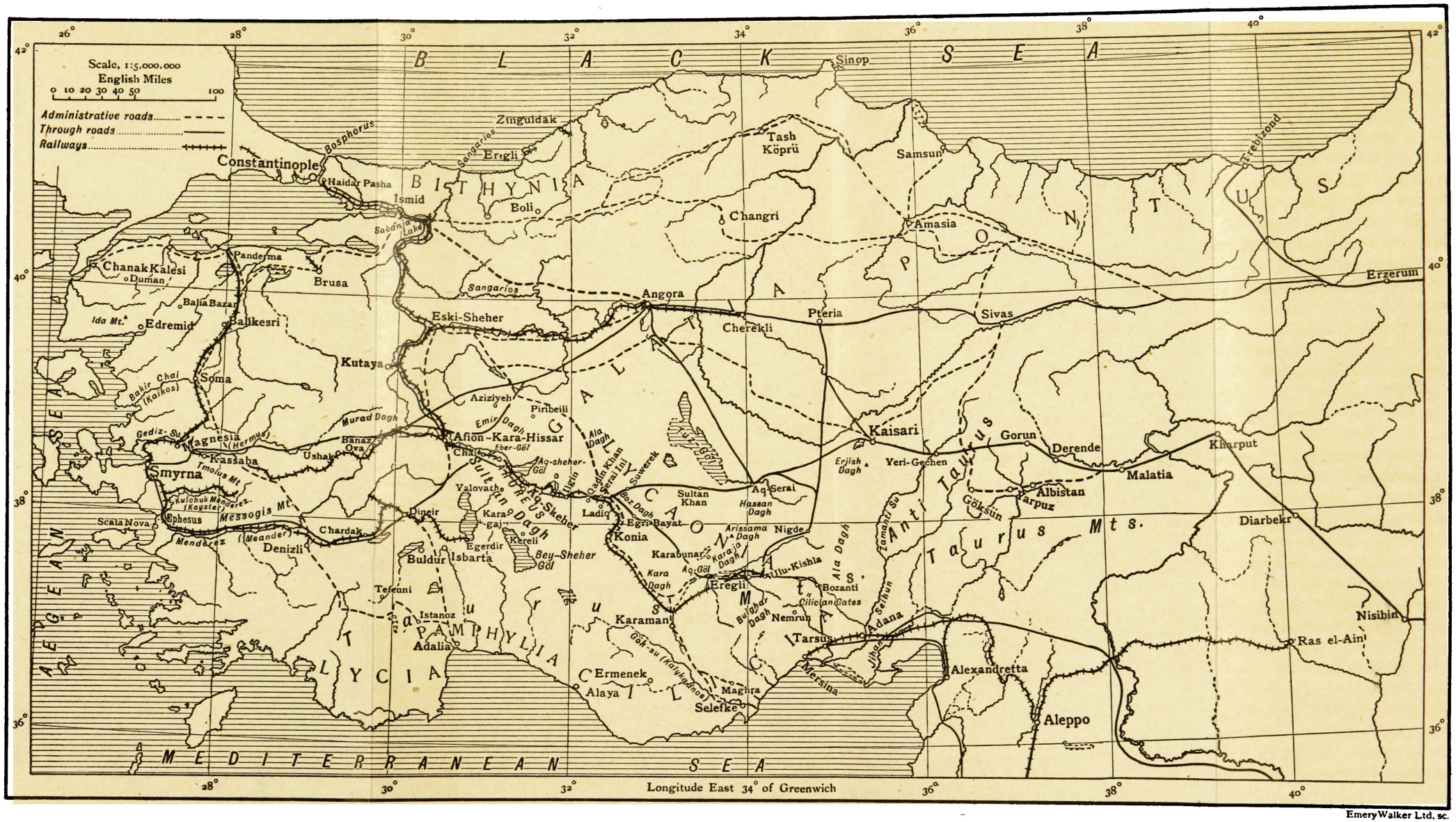
His son, John Comnenus (1117–42), a brave and able general and emperor, conducted his wars along the trade route, marching by Philadelphia or by Ephesus. He forced the Seljuks back from Denizli, which they had held for some years, to Dineir; and finally captured the strong castle of Olu-Borlu. His son and successor, Manuel, in the beginning of his reign led an army from Cilicia to Constantinople. It is mentioned that he passed within sight of Konia. This means that he must have marched by Karaman (Laranda), and kept northwards near the Phrygian hills and along Paroreios. The reason for his choosing a route close to the Turkish capital, Konia, must have been consideration of the best water-supply. He had a strong army, which the Turks did not venture to attack, while he did not feel able to besiege Konia. The memory of that Turkish hesitation played its part in leading him into the rashness of his last campaign in 1176, when with a magnificent army consisting of the flower of European and Greek soldiery, Norman nobles, Varangian guards from Britain, and everything that could be gathered during thirty-six years of a warlike reign, he marched by Philadelphia and Dineir against Iconium. At Dineir he

diverged from the trade route, and advanced by Olu-Borlu and the north coast of the double lake, Hoiran and Egerdir (the Limnai). Pushing on up the open pass that leads to Yalovach, and refusing to listen to counsel and clear away the Turks from the low hills on the north, he marched on with the enemy gathered on his unguarded left flank. The vanguard, in which Manuel himself rode, crossed a slight elevation beyond Kundanlu, and disappeared from view. Then came the loaded wagons, carrying baggage and equipment. A wagon broke down, and caused a jam. The rear marched up. No one called a halt. A helpless crowd, without room to use their swords, were caught by the sudden attack of the light Turkish horse. There was no battle, but only a massacre, while Manuel with the van marched gaily on, knowing nothing, until he was attacked on rear and flanks by the Turks. This battle sealed the doom of the Byzantine Empire, which had been reviving under the crafty Alexius and the honest and able John Comnenus, and even under Manuel, who was bold and warlike.

Barbarossa

In 1190 Barbarossa led his army of the Third Crusade by the same path, and saw the relics of that terrible defeat. The German Emperor did not go on to Yalovach, seeing the great Turkish army gathered to resist him; but suddenly diverged from this road and took the trade route by Chai and Aq-Sheher, along the great valley of Paroreios. At Konia he defeated the Turks and occupied the city. Then, advancing by Karaman, he crossed Taurus by Said Pasha's road (Section III, **13**) and perished in the waters of the Gök-Su (Kalykadnos).

Sketch Map of Asia Minor, showing approximate course of Roads and Railways



II. That it is returned to the Loan Library from which it was borrowed within one calendar month or earlier—

(a) If no longer required.

(b) If asked for by the Officer in charge of the Loan Library.

III. That it will not be sent through the post if by so doing it is likely to pass through the hands of foreign postal officials.

If the book is required for a longer period than one month application should be made to the Officer in charge of the Loan Library stating the further period for which it is required.

N.I.D. 7255/24.

[1753] 10923/D361 20m 9/24 G & S 126

S. 604a. (Established—August, 1924.)

To be inserted inside the front cover of all "Official Use Only" and other non-confidential books in Loan Libraries.

NORE ..... **Loan Library.**

Attention is drawn to the regulations relating to the care and custody of "Official Use Only" books as laid down in C.B. Form U2D.

This book is issued upon the following conditions:—

I. That every precaution is taken to ensure that its contents are not communicated to any unauthorised person and that when not in use it is to be kept locked

CONFIDENTIAL

THIS book is the property of H.M. Government. It is intended for the use of officers generally, and may in certain cases be communicated to persons in H.M. Service below the rank of commissioned officer who may require to be acquainted with its contents in the course of their duties. The officer exercising this power will be held responsible that such information is imparted with due caution and reserve.

DECLASSIFIED

SOLD BY
STATIONERY OFFICE

Confidential.

II

Attention is called to the penalties attaching to any infraction of the Official Secrets Act.

C. B. 847c

A HANDBOOK OF ASIA MINOR

VOLUME III. PART 3

THE SOUTH COAST LANDS BETWEEN THE DALAMAN CHAI AND THE LAMAS SU

Prepared on behalf of the Admiralty and the War Office

JULY, 1918

NAVAL STAFF
INTELLIGENCE DEPARTMENT

NOTE

Asia Minor is treated in four volumes, some of which are issued in separate parts. The first volume contains information of a general nature. The other volumes are devoted to the detailed description of topographical features, railways, roads, and cities. The second volume deals with the western part of the peninsula up to the Dalaman Chai, the rim of the plateau, and the route of the Anatolian Railway from Afiun Kara Hissar to Ismid. To the third volume (divided into three parts) are assigned the mountains of the north from the Bosporus to the Halys, the central plains from Eski Shehir to Kaisari, and the mountains of the south from the Dalaman Chai to the Lamas Su. The fourth volume contains a description of the eastern part of the peninsula, and is divided into two parts, devoted respectively to the region between the Black Sea and Kaisari and to the country round the Gulf of Alexandretta—Cilicia, Antitaurus, and North Syria.

All estimates of mileage in the present book are based on the rough calculations of travellers or on sketch-maps. They are to be regarded as approximate.

It is necessary to emphasize the fact that in the circumstances the information given cannot be complete or up to date, and may occasionally be inaccurate. The Admiralty will be glad to receive corrections and additions.

LIST OF MAPS FOR USE WITH THIS VOLUME

KIEPERT. *Karte von Kleinasien.* 1/400,000, Sheets C. 2, 3, 4, D. 2, 3, 4.

ASIA MINOR. 1/500,000, Naval Staff I.D. Admiralty. Sheets 13, 14.

ASIA MINOR. 1/250,000, War Office, G.S.G.S. Sheets 36–40

CONTENTS

	PAGE
INTRODUCTION	9
General Geographical Description	9
Mountains	12
Rivers	17
Valleys and Plains	30
Coast	35
Climate	36
Vegetation	38
Fauna	39
Population	40
Trade and Industry	43
Communications	43
Supplies and Transport	48
Telegraph System	49
ROADS AND TRACKS	50
GAZETTEER OF TOWNS	139
INDEX	153
MAP OF ROUTES	*at end*

VOL. III. PART 3

THE SOUTH COAST

INTRODUCTION

General Geographical Description — Mountains — Rivers — Valleys and Plains—Coast—Climate—Vegetation—Fauna—Population—Trade and Industry — Communications — Supplies and Transport — Telegraph System.

General Geographical Description

To the W. of the mountainous table-land of Armenia, where the Tigris and Euphrates have their source, there stretches a vast plateau, bare and treeless, with a great depression in its centre and secondary depressions round its edges, into which the bulk of its drainage is absorbed. On the W. this plateau falls gently down to the sea in a series of river valleys; along these valleys lie the routes which peaceful and warlike intercourse between the Aegean and the Sea of Marmora on the one hand, and the central plateau with Persia, Syria, and Mesopotamia on the other hand, has followed throughout history. On the N. and the S. there rise parallel to the sea two mighty mountain barriers, which separate the coast from the interior. The southern and higher barrier is the Taurus range.

Asia Minor is destined by nature to serve as a bridge between the Balkan Peninsula and the interior of Asia; the mountain ranges on the N. and S. are to the peninsula what its parapets are to a bridge, confining roads and traffic to an easterly and westerly direction. There is no region on the face of the globe where land and sea are so intermingled as in the system formed by the eastern part of Greece and the western part of Asia Minor. The peninsulas, islands, straits, plains, river valleys, and mountains which extend from the

Sea of Marmora to Crete and include the Greek mainland and the western coast-lands of Asia Minor form a single, if not very compact, area, and have always been, in aspect, population, and conditions of life, Greece. On the other hand, the N. and S. coasts of Asia Minor are outside the true Greek world; the configuration of these coasts is quite different from that of the W. coast. They lie below the parapets of the great bridge, and have always lain outside the currents of commerce and of war which move over the plateau. The west and centre of the peninsula have been drawn into the movements of world events to a greater degree than the coastal areas of the N. and S.

Take a map of the S. coast of Asia Minor and glance at its main outline, passing from W. to E. First there is the island of Rhodes, which stands as the eastern barrier, just as Crete stands as the southern barrier, of the Greek lands properly so called. Not far to the E. of Rhodes a blunt rugged peninsula runs out into the sea; then the coast-line turns sharply to the N., to turn S. again and form a second blunt peninsula, which in its turn is succeeded by a second great indentation before the coast runs southwards to Syria and Egypt. The two great projections are the ancient Lycia and Rough Cilicia, which are formed by ramifications of Taurus reaching down to the sea. In the intervening indentations, where the sea penetrates to the N., the mountains recede still farther to the N., leaving room for two plains of inconsiderable extent. These plains are Pamphylia and the low-lying part of Cilicia. It is obvious that the bleak mountain areas must always be less developed and of lower economic importance than the plains.

But as between the two plains themselves an important distinction must be drawn. The Cilician plain, which lies on the great Cilician Gates route from E. to W. and is an outpost of Syria in Asia Minor, has played its part in world history. The Pamphylian plain, lying in an enclave between the Lycian and the Cilician mountains, has always been of minor importance. Its land communications are with the N., and

lead over the gorges and cols of the Pisidian mountains to the Maeander valley, the great lakes, or Konia.

Taurus is generally called a mountain-ridge, but it is really an elevated plateau from 6,000 to 9,000 ft. above the sea. In breadth it varies greatly, generally not less than fifty miles, but in some cases much more, according as the mass of the elevated plateau extends outwards towards the N. or approaches close to the sea on the S. The latter is especially the case between Cape Khelidonia and Adalia, where the mountains rise steep from the water's edge; also in some parts of western Cilicia (Rough Cilicia or Tracheia) the outer edge of the plateau approaches close to the sea.

In this elevated Taurus plateau there is an extraordinary diversity of conformation. In some cases there are very marked continuous high ridges, such as Bulghar Dagh, which lies on the western side of the ridge leading down from the plateau to Bozanti and extends W. and SW. for a considerable distance till it gradually merges into the main mass of the elevated plateau. In this neighbourhood Taurus seems to run NE. to SW., but on the N. side of Pamphylia the mountain-ridges appear to run directly N. and S., both on the S. side towards the coast and in the northern direction towards the plateau, where the great ridge which is called by the Turks Dipdavras or Dipoiras (8,000 ft. or more), on the western side of the Beyshehir Lake, seems to be part of a mountain conformation similar to the lofty ridges which divide the valleys of the Pamphylian rivers on the S. Yet only a little farther to the W. one finds that the ridges of Taurus again resume their general E. to W. direction.

The description given below does not include the whole system. It covers only that part of it which forms the watershed between N. and S. from the Cilician Gates on the E. to the Dalaman Chai on the W. It omits outlying portions N. of the watershed which may be more properly treated in the volume which deals with the central plateau. The eastern area is described in vol. iv of the Handbook of Mesopotamia and in vol. iv of this Handbook, and the western section in vol. ii.

The boundaries are of course to some extent indeterminate, and in dealing with communications within the area which on the S. belongs geographically to the part of Taurus here described, it is necessary to pass beyond these limits on the N. and include important centres such as Denizli in the upper Maeander valley, Buldur, Isbarta, and Egerdir in the region of the great lakes, and Konia, Karaman, and Eregli on the great Lycaonian plain.

Mountains

The general lie of the mountain-system from the Cilician Gates to the Yedi Bel, SE. of Karaman, has already been described in vol. iv. Attention has also been drawn there to the difference in appearance between the inner and more ancient chain with its softer outlines and the broken character of the ridge to the S. A similar distinction may be drawn between the eastern part of the mountains in this region and those more to the W. The system formed by the Bulghar Dagh and Kyzyl Tepe presents no uninterrupted levels; the plateaus are in general small in contrast to those of the Dümbelek Dagh and Kara Bunar Dagh, the only table-land of any extent being the undulating depression between the two main ridges. Other features which distinguish the eastern region from that between the Dümbelek Bel and the Yedi Bel are the less frequent occurrence in the former of the typical 'karst' country and the presence of more extensive forests.

The Dümbelek Dagh runs from the district of Belbashy, first WSW. and then W., till it breaks up into a series of lower ridges, coming to an end at the Yedi Bel. W. of this important pass its trend is no longer recognizable.

The Dümbelek Dagh is imperfectly known. In the E. it springs from the limestone plateau, here 7,500 ft. high; on the N. it rises from a depression 5,500 ft. high, in which rise the Divle Su, Ibrala Su, &c., which flow N. to the central plateau. The ridge above these levels is completely bare,

and its crest rises on the E. to over 9,800 ft. Towards the W. it gradually lowers and becomes more uniform. None of the peaks E. of the Dümbelek pass appears to have been ascended. The ridges and cones of the western extension have different names—Kara Kuyu Dagh, Avdan Dagh, Perchin Dagh, Üllük Dagh, Mesabosulu Dagh, &c. The character of the chain as a whole alters W. of the Dümbelek Bel. E. of this pass it is a region of extensive uninterrupted high-lying plateaus; W. of the pass the system consists of a series of smaller plateaus separated from each other by numerous deep valleys. The chain of Karabunar Dagh (Ivriz Dagh, Yarly Dagh, alt. 7,500 ft.) lies like a rampart guarding the northern flank of Dümbelek Dagh, and is mostly bare. Towards the W., on its northern side, the Karabunar Dagh seems to merge in the heights which run S. from the Ak Göl.

In the region of the Yedi Bel the Dümbelek system comes to an end. W. of this, as far as the Gök Su, it may almost be said that there is a break in the continuity of the mountain-rim. When sharply defined ridges begin again W. of the Chivi Su the general direction of the chains is from SE. to NW. The direction of the break in the system as a whole may also be said to be from SE. to NW. and the lie of the land is shown by the courses of the main streams, the Lamas Su and the Gök Su, which make their way to the S. coast with a general south-easterly trend.

This intermediate region may not inappropriately be called Low Taurus to distinguish it from the tremendous walls of which the Bulghar Dagh is the first on the E., or the broken ridges which lie S. of the great lakes on the W. The elevation which roads must attain to traverse it is not indeed much lower than that of the passes through the other parts of the range. On the other hand, few peaks rise above the general level, and the gradual slopes give so easy a character to the roads, that the evidence of the aneroid is needed to give the traveller any just idea of the height to which he has climbed.

The lower slopes on the N. and S. of the watershed are

thickly covered with a forest of pines on the higher ground, and ilex, wild olive, arbutus, lentisk, juniper, and other kinds of dense undergrowth on the lower.

S. of the watershed there is hardly any level country, the mountains falling to the water's edge except where a river, like the Gök Su, has thrown out an alluvial tract into the sea. It was, no doubt, the absence of plain and the barren character of the hills, rather than any special ruggedness, which earned for this region in ancient times its epithet of Tracheotis.

S. of Karaman lies a stretch of broken hill-country, partly covered with forest. Farther S., and W. of the Chivi Su, these outliers culminate in the most northerly of three parallel chains which follow the middle course of the Gök Su in a NW. direction. The summit of the first main chain, the Melis Dagh, is covered with a forest of cedar and pine. Its northern side slopes more gently than the southern, which falls steeply to the Gök Su, here a very deep and swift stream flowing in an impassable ravine.

The next range to the S. rises steeply from the river and its northern slope is also covered with forest. It has a broad undulating back and on the S. side falls abruptly to a narrow valley, from which rises the most southerly of the three ridges, the Top Gedik Dagh. This is a bare range rising from the limestone plateau at a height of 5,800 ft. Its crests probably rise to about 8,000 ft.

S. of the Top Gedik Dagh the country appears to be of a character similar to that which trends SE. from Low Taurus. The slope of the country seems to be roughly the same and is apparently determined by the lie of the mountains SW. of Ermenek. A series of mountains enclosing lofty table-lands starts from the neighbourhood of Cape Anamur and runs generally NNW. to join the western extension of the Top Gedik Dagh. The region as a whole is little known, but the estimated heights of the various chains between Ermenek and the sea are such as to suggest that they form part of the main Taurus system.

The western extension of these mountains after their

junction with the continuation of the Top Gedik Dagh has been little explored, but seems to merge in the Gheyik Dagh, which is the name given to the great massif N. of Alaya. The Gheyik Dagh forms a salient angle in the main wall of Taurus.

W. of Gheyik Dagh there is a lofty pass over the range, which then turns NW. and sweeps majestically towards the S. side of Beyshehir Lake. This part of the range, called by different names in different places, forms an insuperable barrier to traffic, but round its NW. extremity passes a road which carries traffic between Konia and Pamphylia. The next great ridge, as we move westwards, runs due N. and S. Starting from the huge mass of Dipoiras, in the space between Egerdir and Beyshehir lakes, it runs S. to the Ovajyk Dagh, which overlooks the plain of Pamphylia. (See also the section dealing with the Pamphylian plain.) Dipoiras, and the twin mass of Davras, S. of Egerdir, carry the watershed far to the N. in this area. Between Dipoiras and Davras, and again W. of Davras, run the roads from Adalia to the central plateau via Egerdir and Isbarta.

The N. and S. trend is maintained by the next ridge, or rather series of ridges, the southern portion of which forms the eastern rampart of Lycia. Beginning S. of Buldur, broken by the valley of Fughla, this ridge runs almost continuously down to the sea at Cape Khelidonia.

In its main outline Lycia forms an arc-shaped peninsula, a broad bastion of mountain-land jutting out into the sea between Adalia and the mouth of the Dalaman Chai. The structure of the land is determined by the broad plateau of Elmaly, 4,000 ft. above sea-level, which projects in a mighty ledge from the main mass of Taurus. The plateau of Elmaly is surrounded by long ridges which run parallel to the coast on all sides, and in some of their peaks attain a height of over 7,000 ft. Gurdef Dagh and Ak Dagh (Massikytos) on the W., Susuz Dagh and Ak Dagh on the S., Kyrk Bunar Dagh and Bey Dagh on the E. form an almost continuous rampart around the plateau. On the N. the eastward and western

mountain-walls join up with the Taurus table-land. Corresponding to the three main points of direction in which they extend, those ridges fall down to three great valleys, which drain their outward slopes. Those valleys form, as it were, a fosse around the mountain rampart. They are the Xanthus valley in the W., the Dembre valley in the S., and the Alaghyr valley, parallel to the Xanthus valley, in the E. The Bashkoz Chai forms yet another valley, which breaks the continuity of the bastion at the SE. corner. The mountains which lie outside the main rampart enclosing the Elmaly plateau are either outliers of the main ridges, separating the above-mentioned valleys from each other, or independent masses separating the valleys from the sea. They have been described as lower outworks of the great rampart. On the W. this outlying system is represented by the island-like group stretching from Makri to the mouth of the Xanthus; on the E. by the chain which terminates in Cape Khelidonia; on the S. by the range overhanging the coast from Kalamaki Bay to Fineka Bay and opening out into the Dembre plateau in its eastern portion.

The extraordinarily broken character of the Lycian country opposes the greatest difficulty to traffic between depression and depression; often a day's journey is necessary to get from one side of a river valley to the other. Lycia has always been a land of small independent communities, holding little intercourse with one another. From the rich life, which has always been characteristic of the lands of the W. coast, Lycia is cut off by the wild Dalaman Chai region. The only area in which a considerable homogeneous population can subsist is the Xanthus valley; in this valley lay the ancient capital of the land, Xanthus, and several other prosperous cities.

The Taurus table-land N. of Lycia proper consists for the most part of broad ridges enclosing high table-lands. Many of these plateaus have no outlet for the drainage of the adjacent slopes and part of their surface is often filled by marshes or lakes.

The Göben Dagh and Rahat Dagh appear to form the

main watershed, and their general direction is from NE. to SW. The main streams N. of the watershed make their way either N. towards the Buldur Göl or NW. in the direction of Denizli in the upper Maeander valley, where the general E. to W. trend of Taurus is resumed by the Baba Dagh.

The rock which forms the greater part of the area just described is a cream-coloured compact limestone, often well adapted for sculpture. In many places it presents a brecciated structure; in others it appears as a grey gritty stone, the weathered surfaces of which are drilled with cavities and perforations. It is often veined and traversed by flinty or cherty layers or again degenerates into a soft chalk-like formation.

In places the strata are much contorted.

Bordering some of the river-valleys and the alpine plains or yailas are strata of greenish sandstone and shale sometimes of considerable thickness. Rocks of igneous origin are not infrequent. Serpentine appears to be the commonest, but trap rocks of later date are found in various parts.

Rivers

The rivers of which some description is given in this section have been taken in order from W. to E. As Lycia may be regarded as a geographical area by itself, the paragraphs on the Gebren Chai and Istanoz Chai, which flow towards the central plateau, come immediately after those on the Lycian rivers, which run to the Mediterranean.

The Dalaman Chai

As the traveller crosses the Kazyk Bel, between the Khonas Dagh and Baba Dagh, there opens before him an upland valley drained by the upper waters of the river known in its lower reaches as the Dalaman Chai. The ridge which bounds this valley on the W. runs SSE. from the Baba Dagh. On the E. a ridge from the Khonas Dagh stretches in the same direction for a long way, till at last it sinks to the pass that leads from Bey Köi to Tefeni and the valley of the

Gebren Chai, which runs N. to the Buldur Göl. Beyond that pass the hills rise again to the great Rahat Dagh, which stretches from NE. to SW., forming part of one of the main chains of the Taurus system.

The general impression of the traveller, as he sees the valley from the Kazyk Bel, is that its slope is towards the S. In reality it slopes from both ends down to its lowest point about the middle, and at this point is the junction of two main streams, one from the NW., the other from the SE., whose united waters then flow S. with a general trend slightly westwards.

The northern branch, the ancient Kazanes, rises in the Khonas Dagh, and flowing SE. through the marshy plain of Kara Öyük Bazar, is fed by a main tributary, which comes from the high-lying valley of Khoros and Göne, through a gorge in the eastern ridge.

The southern arm rises between the Karynja Dagh and the Kartal Dagh, and fed by numerous streams flows N. down an easy valley which gradually widens out. After some miles an important tributary, the Pirnaz Chai, comes in on the l., a little below Ebejik village, and the united streams, forming a considerable river, continue N. down a wide valley which opens out into the Gölhissar Ovasy. The lake of Gölhissar lies some distance E. of the river, separated from it by a slight elevation.

The river now begins to be known as the Khorzum Chai, from the important village of Khorzum, which lies some short way from its l. bank. Not far below this village the important Chandyr Chai comes in from the SE., and a little farther down another large stream called the Ak Su. By this time the river has taken a NW. trend, and still farther down the valley it bends W. to join the northern branch.

The upper reaches of the united streams are known as the Gereniz Chai. The river now enters the mountains, and its valley gradually becomes narrower. Cultivation becomes more scanty, though tobacco- and maize-fields are still to be seen. In the valley are willows and planes, with a few wild

pears, while higher up the slopes are covered with pines and junipers. In this stage the river receives few tributaries.

Before long the river is unfordable, with a swift current. The banks become continually steeper and the valley narrower.

The track which follows the general course of the stream has to leave it near the point where it receives the waters of the Karanfyl Chai. This stream comes in on the l. bank, and is perhaps the largest feeder of the main river in its middle course. It rises in the neighbourhood of the Kartal Dagh, not far apparently from the head-waters of the Pirnaz Chai and Karynja Chai. The country forming the watershed between these streams is said to be impassable.

About the point where the Karanfyl Chai comes in the main stream apparently begins to be called the Gürlek Chai, a name also given to a feeder which comes in on the l. from the village of Gürlek. The river now flows in an impassable gorge till it emerges into a valley which opens out to 20 or 25 miles broad, through which it makes its way to the Mediterranean. (See also p. 31.)

The total length of the river, measured from the source of the Karynja Chai, is said to be about 105 miles.

The only regular route in the lower region of the river is a caravan track which crosses the stream at Ak Köprü, a stone bridge of three arches about 50 ft. above the water, which spans the river some distance above the point where it enters the plain. This route runs thence to Gürlek and Pirnaz. In the region above Gürlek communications are quite undeveloped. The mountains of this little-known region are covered with a wonderful primeval forest, without undergrowth or grass. Only beside the streams in the valley-depths are there planes and oleanders, brushwood and thin grass. One may travel for half a day without seeing a village, and there seems also to be a scarcity of wild life.

The Koja Chai (ancient *Xanthus*)

The upper reaches of this river are fed by the streams which drain the high-lying hill country NW. of the Elmaly plateau.

The main stream in this region takes a general SW. or WSW. course determined by the lie of the mountains which form the NW. rim of the plateau, and is known as the Seyidler Chai. Its waters here are clear, and it is called the Ak Chai by one traveller, who speaks of it as being shallow in November. The same name is given to a strong tributary which comes in from the Kartal Dagh some distance below the village of Ören. The river by this time has bent round to a southerly direction, following the line of the western rampart of the Elmaly plateau. Some distance above Ören it receives the waters of a strong spring, and at the village it emerges from a steep ravine, and enters the plain, of which some details appear below (see p. 31). In this lower part of its course it receives many tributaries, some (e. g. the Gerisburnu Chai and the Mangyr Chai on the l. bank) of considerable size. The yellowish colour of the alluvium which it carries with it through the plain gave the river its ancient name of Xanthus.

Below Düver it takes the name Koja Chai. Not far below Düver the breadth of the river is about 100 ft., with a depth of about 2½ ft. A little above Günük the banks are steep and rocky, but the stream is apparently still fordable. One traveller who crossed it about here when the river was high in December found the depth about 6 ft. A short distance below Günük there is another ford, and the l. bank here is 10–14 ft. high. A little lower down the river enters a marsh, through which it flows to the sea (see also p. 31).

The Dembre Chai

The main stream of this river rises in the mountains above Bazyrghyan Yaila, and takes a general easterly direction. It soon attains a considerable size, being fed by the watercourses from the mountains on the N. Near Haji Oghlan it runs between closely approaching rocks beneath high trees, and shortly afterwards emerges into a small plain, in which is the small village of Assaralty, on the r. bank. Below the village its valley becomes impassable for some miles. Then it opens out into the upland valley of Kash (see p. 32), and

flowing NE. receives several tributaries from the N., the chief being the Yailany Chai. Some miles beyond Kash Kassaba it turns SE.

A little below this point an important tributary, the Ernez Chai, comes in from the NE. The river now flows rapidly, winding from side to side of a picturesque narrow gorge, which floods make impassable in winter. The sides of the ravine are great limestone cliffs, whose fissures are clothed with luxuriant vegetation. Oleanders grow along the banks, and the valley walls are covered with myrtles, laurels, and arbutus, till at length the stream enters the plain of Dembre, from which it takes its name in the lower part of its course. It enters the sea by a delta.

The Bashkoz Chai (ancient *Arycandus*)

There is very little evidence regarding the upper course of this river. Not far from Elmaly a considerable stream disappears into a *düden*, and it is said to emerge, after some miles underground, as the Bashkoz Chai. If this account is true, the source must lie in the mountains bounding the Elmaly plateau on the N. It seems probable, however, that this represents merely the local belief, which is scarcely supported by the description of the river much farther S., at Bashkoz village, as a small stream. It seems more likely, therefore, that the stream rises on the S. side of the Elmaly mountain-rim. The upper valley is rocky, and its sides are covered with firs and pines. There is here little cultivation. Farther downstream the pines give place to walnuts, with planes in the valley depths.

At Demirji Köi, some distance below the point where it enters the plain of Fineka, the stream is shallow, flowing in a broad slaty bed. It is said to be greatly swollen in the rainy season. The name given to it here is Orta Chai.

The Alaghyr Chai

Very little is known about the course of this river. It rises on the E. side of the mountains bordering the upper plain of

Elmaly, and runs in a general direction almost due S. The valley of its upper reaches is almost uninhabited and desolate, without trees or bushes. Near Kürje Köi the bed of the stream is stony and broad, in a narrow valley filled with plane trees. The valley apparently remains narrow all or most of the way through the mountains. Lumbering is carried on at least in the lower middle course of the stream.

A short distance after the stream enters the plain there is a Roman bridge of 25 arches, which was in regular use in the earlier part of last century. The river here is very broad, and shallow in summer, though probably deep in flood time.

During its course it receives many tributaries from the mountains on either side.

The Gebren Chai (ancient *Lysis*).

In the hills that bound on the E. the valley of the Khorzum Chai (see p. 18), there rise various streams which unite to form the Gebren Chai. One main stream comes from Gebren village, and flows SE. into the upper part of a long valley running NE. Here it joins another main stream, sometimes called Hassan Pasha Chai, from the SE., which drains the northern slopes of the watershed between it and the sources of the Istanoz Chai.

The upper part of the valley forms a district by itself. It is broad, open, and fertile, and there are here many villages, of which the most important are Tefeni, Karamanly, and Hassan Pasha. Below it the valley becomes narrower and less fertile. The country becomes rough, and the river follows a narrow glen through the broken ground which occupies a good deal of the valley on either side. Farther down there is a wider stretch of level ground on either side of the river, after which the hills close in on both sides, forming a narrow gorge. Through this ravine the river forces its way into the plain of the Buldur Göl, and empties itself into the lake.

The Istanoz Chai

This stream rises not far from the SE. source of the Gebren Chai on the S. side of the watershed, and flows ESE., followed

by the Denizli–Adalia road (see Route 11). In the upper part of its course the river flows through a series of small plains and then enters a narrow wooded valley. Some distance down the valley there is (or was formerly) a bridge of one high arch. The river here is about 40 ft. broad and 2 ft. deep in October, and falls in a series of cascades. At Dere Köi, farther down, it winds considerably in an E. and ESE. direction, and lower still again falls in cascades which are used for driving mills. Below this the valley opens out, and olives are now to be seen in the plain.

The river continues past the important village of Istanoz, and keeps a more southerly course for some distance, till suddenly it bends NNE. There also the valley broadens out, and in places becomes swampy. The river itself now appears to be of less volume than higher up, and at a short distance below the bend the breadth (in October) is about 12 ft. and the depth 2 ft.

There is very little information available on the river and valley from this point. Farther down, steep rocky hills approach the stream on the E. and the valley here is about 1½ miles broad. A little lower, the hills on the W. also draw nearer. About this point apparently a tributary of considerable volume in spring comes in on the l. from the valley of Fughla. Still lower, the main stream is broken up into several channels, the valley alternately narrows and widens, till at length the stream passes between steep walls of rock, full of caves. The direction by this time is nearly E., till the stream enters the valley traversed by the road from Buldur or Isbarta to Adalia. The river now bends N., and continues in the same general direction till it enters the Kestel Göl at its SE. end. In this part of its course it contains a considerable volume of water only in spring. In autumn little is left of it except pools or marshes in the valley.

The Ak Su (ancient *Cestrus*)

The main upper stream of this river is the Isbarta Chai, which, rising on the N. slope of the Aghlasun Dagh, flows at

first N., and rounds the N. end of the mountains at Isbarta. Then changing its course it bends SSE., and enters the valley between the Aghlasun Dagh and Davras Dagh. Some miles lower down it receives a fairly important tributary, the Aghlasun Chai, on the r. bank, and here leaving the region of the upper plateau the stream enters on its middle course.

The valley walls in this area are at first less definite, but lower down they become gradually higher and more rugged, forming narrow gorges dominated by rocky wooded mountains. On the r. bank there are practically no side valleys and no tributaries of any importance come in on that side. The E. side of the valley is also very little broken, at least by ravines of any size.

Some hours downstream from the junction with the Aghlasun Chai the valley opens out into a small plain, where the river receives a tributary on the l. bank, possibly fed by underground channels from the Koghade Göl. Still farther down it enters a large plain, the Pambuk Ovasy, where several tributaries come in on the E. The most important of these are the Küchük Chai, which comes from the high-lying region of Baulo (see Route 15) and the Chandyr Chai.

S. of the Pambuk Ovasy rises the mountain mass of Bozburun, from whose slopes come several feeders to the main river.

Emerging from the hills the river turns E. for some distance, and then S. through the Pamphylian plain to the sea. At the point where it is crossed by the chaussée from Adalia, it is about 50 yds. wide and unfordable. It is said that in ancient times the river was navigable for some distance from the sea, but this appears to be no longer practicable. In the earlier part of last century the breadth inside the bar at the mouth was about 100 yds., and the depth about 15 ft. The water on the bar was not more than 1 ft. deep.

The Köprü Su (ancient *Eurymedon*)

The main upper streams of the river now known in its lowest reaches as the Köprü Su are said to be called the Ak Su and the Kara Su. The former, coming from the NE., joins

the latter, which emerges from a narrow gorge from the SW., on the western edge of the Syndan Ovasy, a plain lying at the W. foot of Dipoiras. From here the river takes a south-easterly course through narrow wooded ravines past the village of Aivaly. At Chöpelde Belenje the valley broadens, and a little farther down the river makes a sudden bend W., breaking through a ridge, the Tota Beli, after which it turns S. past the village of Kasymlar. The name by which the stream is known here is Ak Su, and here its middle course may be said to begin.

The river now for some distance flows between walls often nearly perpendicular, and fills the whole of the ravine bed. Side valleys are almost entirely absent. Farther downstream, just above the village of Kesme, which lies about 1½ miles from the l. bank, the breadth of the stream is 25–30 ft., and the bed is filled with boulders. Still lower, a strong tributary, the Deirmen Chai, comes in on the l. bank. In spring this feeder is nearly as large as the main river, the ravine of which here opens out somewhat and admits of a track down the stream. The general direction here appears to be first S. and then SW. A few miles down, some tributaries come in, the most important of which are the Kurtly Chai and Boghaly Chai. The valley here is broader, and the stream bed more sandy, with a depth in November of 2 ft. and a breadth of 50 ft.

A little lower is Bulasan village on the r. bank, at a point where a short tributary enters the river through the valley lying between the S. end of the Zarb Dagh and the N. end of Bozburun. This is about the wildest part of the whole river valley, though the presence of cotton fields shows the approach to the climatic conditions of Pamphylia.

Till it emerges on to the Pamphylian plain the river now seems to flow in deep valleys, and its bed cannot be seen from the tracks which traverse the high ground above. In this stage the tributaries on the W. side, which appears to be the steeper and higher, are small, and those on the E., though more numerous, do not seem to be important.

A little above the village of Balkyz the mountain country and the region of pines is left, and the river pursues the rest of its course, a distance of 12–15 miles, through the plain. It is about 90 yds. wide and unfordable, with a swift current, at the bridge which carries the chaussée from Adalia, and it is said that boats can ascend to this point. There is no recent information about the breadth or depth between this and the sea. In the earlier half of last century the breadth above the bar which lies at the mouth was about 140 yds., and the depth about 15 ft. The bar itself at that time had only 1 ft. of water on it.

The Menavgat Chai

The head-waters of this stream rise in the Pisidian mountains at a height of about 3,000 ft. above the sea. The most important of its upper tributaries come from the neighbourhood of Ilarma on the W. and Budania on the E. Many of its other sources, however, are also copious, and it soon attains a considerable size, with a breadth of nearly 40 ft.

Below the places just mentioned the river flows in a SSW. direction, deep and still at times, at others shallow and rapid. Its bed here is deeply cut in the steep mountains, and it receives no important above-ground tributary, but, like the Köprü Su, is swelled by a considerable number of underground streams, especially on its l. bank.

Only at a few places do the mountains retire from the river and afford opportunities for extensive settlements. The districts in which lay the ancient cities of Erymna and Katenna, 2½ hrs. distant from each other, the one on the r., the other on the l. bank of the river, is apparently the most important of these, and these places, naturally inaccessible, could isolate themselves still further by breaking the bridge at this point, thus necessitating a 7 hrs. journey from one to the other.

The banks lose their ruggedness 12–15 miles from the sea, when the river issues from its last rocky gorge. This has been artificially widened, and the stream, entering a valley

which gradually opens out, runs rapidly to the sea through richly wooded hill country.

A short distance above the village of Bazarjyk, where it leaves the foothills and enters the Pamphylian plain, the river receives on the r. bank its first important open tributary, the Ak Su, formed by two streams from the foothills.

The river is navigable as far as Bazarjyk. There the breadth is 80–90 ft. and the depth 6–8 ft. The depth opposite Menavgat Kale, about 3 miles from the mouth, is about 13 ft., and the breadth about 120 ft. Lower down there is a depth of 21 ft., which then decreases to 18 ft.

Just within the bar at the mouth the breadth is 550 ft., and the depth 12 ft. The water on the bar is 3 ft. deep.

The Gök Su (ancient *Calycadnus*)

In the region of Dedemköi Yaila, SE. of Siristat, the mountains rise to a watershed on the N. and S. slopes of which rise the streams which feed the northern and southern arms of the Gök Su.

The main upper waters of the northern branch are said to rise about 2 hrs. S. of Dedemköi and flowing ENE. soon form a copious stream. The valley here is fairly narrow, the l. bank being the steeper. The slopes of the mountains which enclose it are used for vine-growing.

A short distance lower down the river bends SE. in a narrow gorge, probably the canyon which extends to within a short distance of Köprü Bashy, at which point the river is already large. The name Buzakche Chai sometimes given to it in this part of its course does not appear to be used by the inhabitants.

Below Köprü Bashy for some distance the river has apparently not been explored. At Takhta Köprü it receives a tributary as large as itself, the Alata Su, whose main source rises as a clear cold stream about 5 min. S. of Alata village in the mountains to the SE. Taking a general NW. course, this feeder is joined by numerous tributaries till at length after flowing E. for some distance it emerges from its canyon into the Gök Su.

Some distance below its junction with the Alata Su the Gök Su disappears for rather more than half a mile underground, thus forming a natural bridge known as the Yer Köprü (Earth Bridge). On the l. and r. side of the gorge respectively rise two tributaries, the Kara Su and the Ak Su, which, flowing their whole length above the course of the main river, fall into it in a cascade. The waters of the Kara Su are not drinkable, and deposit a white sediment which rapidly hardens into stone.

For a long distance below the Yer Köprü the course of the river is apparently unknown. The canyon is possibly impracticable as far as the point where the road from Karaman to Ermenek crosses it (see Route 35). Just above this it is said to be impassable and it contracts again just below the crossing.

Below Grauvga village it seems to be possible to follow the river for some distance till it enters a deep narrow gorge called Cholla Kapusu. The mountains in this part of the river's course are thickly wooded.

Two important tributaries, the Chivi Su and Pirinj Su, come in on the l. bank below the Cholla Kapusu, and farther downstream, nearly due S. of Mut, the southern branch of the river comes in on the r.

The greater part of this southern branch is only vaguely known. Its upper waters seem to be formed by two main streams, the Navahy Su and the Bash Dere. The whole region drained by these streams is a great high plateau, rough and rolling, which falls in almost perpendicular bluffs to the rivers. The tracks in common use seem to avoid the river valleys, which, however, are occupied by a considerable number of small villages.

At some distance W. of Ermenek the two main southern branches apparently unite. The valley of the united streams at Ermenek is about 2 miles wide and fertile.

Some miles below Ermenek is a high stone bridge crossed by a track from the town to the SE. The course of the river here is from W. to E. and the valley floor narrows to a gorge between almost perpendicular rocks. According to an old

account the local name for the southern arm here is Aktary Chai.

From this point to its junction with the northern arm there are practically no details available for this branch of the river. It receives on the l. bank at least one fairly important tributary, the Tekichat Su.

The volume of the river after the union of the two branches is such as to make it unfordable except at a few points. At 5 miles S. of Mut it is fordable in autumn but not in the earlier part of the year. About the middle of May 1906 it was found to be about 80 yds. broad here with a current of 6 miles per hr. Four miles downstream at Karadiken there is another ford and travellers crossing here in the first part of July found the water under the l. bank up to their horses' girths. The stream at this point is about 50 yds. broad and of a dark blue colour.

The valley in this lower part of the river's course alternately narrows and widens. In places the rocky cliffs make it impossible to follow the water. The most important tributary on this stage appears to be the Sarykavak Chai which comes in on the l. bank from almost due N.

Some miles above Selefke the current is very rapid.

The Lamas Su

The source of the Lamas Su is said to be near the Yedi Bel (see Route 37, mile 21). Throughout its short course, not exceeding 50 miles with all its windings, the river makes its way in a general SE. direction, through a gorge which is never more than ½ mile across and is impracticable as a line of communication. The walls of the canyon are sheer precipices, often 200 ft. high, for miles on either side. Near Örenköi the gorge is nearly 1,000 ft. deep and the sides fall almost perpendicularly for 500 ft. At the foot the ground slopes to the river and is covered with pines.

Near the sea the canyon opens out suddenly to the narrow coastal plain, and the stream passes the village and khan of Lamas near its mouth.

A horse-track from Maghara to the mountain-pastures of the Bulghar Dagh crosses its upper course by a ford near a mill not far from Sary Aidin. There is said to be a bridge at Kyzyl Gechit village a little below Örenköi, and there is one between Göyerek and Veseli farther down, about 11 miles from the sea.

The stream turns 40 mills in its course, besides irrigating tiny fields and carrying down timber. It abounds in fish as high up as 4 hrs. journey from its mouth.

The water is good but carries much calcareous matter in suspension.

The Düdens

Underground rivers are characteristic of the region under consideration. Large streams frequently disappear into *düdens*, as the Turks call the openings to the underground channels, the water having little difficulty in cutting a tunnel through the limestone rock where rising ground obstructs its course. Such rivers may run for miles beneath the surface before reappearing. Thus it happens that in many cases streams appear to rise full-grown, being fed by underground channels from valleys or basins from which they themselves are separated by mountain ridges.

The most important of the rivers which rise from or disappear into *düdens* are found near Adalia, in the valley of the Boghaz Su, which runs up from the Egerdir lake towards the Koghade Göl (see Route 16), and in the valleys of the Ak Su and the Köprü Su. Even so large a river as the northern arm of the Gök Su makes its way for some distance beneath the surface and on this stage of its course exhibits the remarkable phenomenon of flowing for about ½ mile beneath two of its tributaries (see p. 28).

Valleys and Plains

Some of the districts within the area generally described above require special mention. The chief of these are the valleys of the Dalaman Chai, Xanthus and Dembre Chai; the

plains of Pamphylia and Selefke ; and the plateau of Elmaly. (See also the Gazetteer of Towns for general remarks on other districts.)

Valley of the Dalaman Chai

The delta of this river is marshy, and there is heavy rainfall in the winter months. The valley is sparsely inhabited.

Above the swamp area there is some cultivation, mainly along the E. side. The chief crops are wheat, Indian corn and coriander. The uncultivated portions are often covered with a tangled growth of brambles, rhododendrons and oleanders, along with a considerable quantity of hardwood trees such as alders and ash. The surrounding mountains are thickly covered with the small Italian pine.

Higher up, the main occupation of the inhabitants is wood-cutting for the Government, the timber being floated down the river. It should be noted that one obstacle to the lumber trade down the Dalaman Chai is a narrow gorge, called 'Kapu', at one point in its course overhung by cliffs over 200 ft. high. At its narrowest the river here contracts to about 6 ft. in breadth and the current is extremely rapid. The Turkish Government has made attempts to widen this passage but without great success, and the logs have hitherto been removed from the river above the defile and refloated lower down.

Chrome-ore is also worked in the Dalaman Chai district.

Xanthus Valley

The Xanthus valley is fairly well cultivated and is watered by numerous tributaries. The lower valley is swampy, but it is said that the marsh cannot be deep, and could be easily drained if the small brooks which feed it from the E. and N. had proper beds constructed to lead them into the main river. Higher up there is good grass in early summer and a certain amount of cultivation. Much of the valley plain is covered with thick brushwood, but the soil is very fertile, and the important ancient ruins show that it once supported a large population. The fact that a railway has been projected to tap this valley is also some index of its possibilities.

Valley of the Dembre Chai

Above the small alluvial plain at the mouth of the Dembre Chai the river valley for a considerable distance is narrow, and floods in winter cover the whole valley floor. Higher up it opens out in a depression over 20 miles long and from 9 to 12 miles broad between the mountain-walls enclosing it on N. and S. In this depression lies Kash Kassaba (see p. 57). The level of the valley floor, however, is only between 3 and 4 miles broad. It forms a funnel-shaped catchment-area for the waters which come down from the southern rampart of the Elmaly plateau. The wall on the S. is about 1,300 ft. high and the general slope of the plain is from that side. Unlike the mountains to NE. and W. those on the S. are an almost unbroken ridge, watered by no streams of any size.

The produce of the district is similar to, but less rich than, that of the Elmaly plateau. (See below, p. 34.)

Pamphylian Plain

The plain of Pamphylia is hemmed in by the mountains of Pisidia and Rough Cilicia, by the east Lycian range, and by the sea. It has an area of 2,200 sq. miles, divided by the course of the Ak Su into two nearly equal portions. To the E. it is traversed by two other rivers, the Köprü and the Menavgat Chai, the latter of which may be taken as the eastern boundary of the plain. The western half is watered by the Düden Su, or ' Underground river ', whose course is visible only at intervals, and which enters the sea in several mouths a little E. of Adalia. Its main mouth forms a cascade as it falls into the sea ; hence perhaps its ancient name Katarraktes.

The plain of Pamphylia, like that of Cilicia, is not uniform and level. Passing from E. to W., three distinct levels may be observed :

I. From the right side of the Ak Su to beyond the Menavgat Chai there stretches a flat uniform alluvial plain, stoneless and marshy in several places, especially in the neighbourhood of the Köprü Su, and said to be largely under water in winter.

There is no information regarding the height of this plain above sea-level, but it is not considerable.

II. W. of the Ak Su, this plain is dominated by a terrace with sharply-marked perpendicular escarpment, which stands 100 ft. above the lower plain. This terrace forms a stony plateau, which extends from the sea to merge in the mountains N. of the plain. The escarpment is precipitous, particularly where it meets the sea in the neighbourhood of Adalia. The terrain consists of travertine, probably deposited by the calcareous waters of the Düden Su. This hard terrain is covered with a thin layer of brown, friable earth. Its surface is not uniform, like that of the lower plain, but is cut into elevations and depressions, which latter sometimes take the form of craters, sometimes of valleys, e. g. that through which runs the road from Adalia to Perge.

III. Farther to the W. a second terrace rises above the first. It too has a perpendicular scarp, and stands 170–200 ft. above the first. The edge of this terrace projects towards the SE., forming an angle pointing at Adalia. From this point the edges run W. to the Lycian mountains and N. to merge in the Pisidian mountains.

A spectator standing at the eastern edge of the plain and looking westwards accordingly sees (i) the lower plain, and (ii) and (iii) the edges of two terraces rising like huge steps behind it.

To the W. and NW. of the Pamphylian Plain, Terrace III merges in the encircling mountain ranges. E. of the Ak Su, those terraces can no longer be distinguished. But here too a terrace or ledge intervenes between the lower plain and the mountains. Its edges are broken and indented, and flat-topped isolated hills fringe them at intervals.

The terrace-formation can be traced far up the slopes of the mountains. The river valleys which descend from the high plateaus do not come down in uniform slopes; they descend over precipitous ledges, and the roads up the valleys have often to leave the waterside and turn to right or to left to scale the scarp of the terraces.

The plain, in so far as cultivated, is very fertile, but population is sparse and tillage in a backward condition. Cereals constitute the chief agricultural products, and after them sesame.

The summer temperature of the plain is almost tropical, and the swampy nature of the ground makes the climate unhealthy.

Plain of Selefke

The plain on the north-western edge of which the town of Selefke lies is formed of yellow clayey limestone and sandy alluvial deposit which has been brought down by the Gök Su. On the N. it is bounded by the spurs of the Karatash. It projects towards the S. in a low dangerous spit called Lissan el Kahbeh, or Bagasse. The middle of the plain is occupied by stagnant pools and high sand-hills on which grow thorny evergreen shrubs. Near the river are pasture lands of coarse grass which support large herds of cattle. There are few trees, but parts of the surface are covered with a thick growth of *Agnus castus*, oleander, *Glycyrrhiza echinata*, &c., and a considerable number of herbaceous plants.

The climate is very hot in summer and mild in winter.

Elmaly Plateau

The plateau may be described as consisting of two plains, one to the E. and NE., the other S. and W. a few hundred feet lower. The latter for several weeks after the snow disappears from the hills remains too swampy for culture and the season for ploughing is therefore late. Both plains are large tracts of corn-bearing land. The hills bounding the plateau on the N. are quite bare, while those to the S. are well wooded.

The chief crops are wheat, barley, maize, chick-peas and many kinds of fruit. Water is abundant and good.

The climate is generally healthy and the temperature low.

The population is mainly Moslem; there are also several thousand Greeks, some Armenians, and a few Jews. The Moslem inhabitants are mainly occupied in agriculture; trade and crafts are carried on chiefly by the Christians.

Coast

The southern coast of Asia Minor is known to sailors as Karamania, from the former Turkish kingdom which included a large part of it. The coast of our area falls into three well-marked sections, the Lycian coast, the Pamphylian coast, and the coast of Rough Cilicia.

On the Lycian and Cilician sections, the mountains generally drop sheer into the water, and the coast is fringed with small islands and rocks. The Pamphylian coast, fringing a low-lying plain, is low and sandy. On the Lycian coast, W. of Cape Khelidonia, there are several safe harbours, such as Makri, Kasteloryzo, and Kekova; east of Cape Khelidonia, especially at Adalia and Selefke, there are open roadsteads which afford safe anchorage in summer.

There is no tidal rise on the coast of Karamania, but southerly and westerly winds raise the water sometimes as much as 2 ft., and northerly and easterly winds lower it similarly, above and below the normal level.

On parts of the coast the gravel beach has become a solid petrified mass, and caution is necessary in landing where there is any surf, as the beach appears an ordinary one. The beaches are marked on the Admiralty Charts.

During summer the sea breeze is generally fresh by day, and the land breeze at night. In April, May, and June the weather is usually serene, with a clear sky. In July and August a white mist often occurs, limiting visibility to a few miles. In September, clouds collect to the southward, and though there is no change in the wind, the mist disperses, and the weather becomes pleasant. The temperature reaches 74° in May, 86° in July, and sometimes 90° in August.

The direction and rate of the currents in the extreme eastern parts of the Mediterranean are not yet thoroughly known. The current on the coast of Karamania, unless affected by gales, generally sets westward, its rate increasing as the distance from the coast of Syria becomes greater. A short distance from the land it is weak, but near the coast its rate is occasionally considerable.

Supplies can be obtained at most of the anchorages, but not in great quantity, unless previous notice has been given to the authorities. Water, though not plentiful in some of the best harbours, can always be taken from the numerous streams.

For a detailed description of the coast, see the *Mediterranean Pilot*, vol. v, First Edition 1915, pp. 107–28. See also Adalia, Alaya, Kilindria, Levisi, Makri, and Selefke in the Gazetteer of Towns, pp. 139 ff.

Climate

Most of the coast towns enjoy a mild winter climate, but are excessively hot in summer. Where the neighbourhood is marshy, as, for example, at Makri, the inhabitants migrate to the hills for the summer months to escape malaria.

The custom of moving in summer from their villages in the lowland valleys to the upland yailas is universal among the inhabitants of the country districts, partly in order to avoid the heat and fever of the lower ground and partly to get fodder, the grass near the winter villages being burnt up early in the summer months.

Some inland towns, such as Elmaly, enjoy a mild and equable climate, but farther N. the winters are severe. Snow lies in many of the passes of the Pisidian mountains till late in spring, and the same is true of the mountain walls to the E. The great road through the Cilician Gates, for instance, is liable to be blocked for days at a time.

About the beginning of November (always on the 4th according to the natives) an atmospheric change takes place which heralds the approach of winter. It is the signal for local shipping to make for port and for the nomadic population to return from the yailas. Storms of rain and hail mark the commencement of the new weather conditions, and are regularly followed by a considerable period of fine days with a temperature of from 61° to 63° F. This period enables the nomads to return to their winter villages, and large bands of them with their flocks and herds are then to be met with in the southern hills. Farther N. the migration takes place rather earlier, before the end of October.

There are too few details available to give any just idea of the temperatures that may be met with during the year. The following have been recorded by various travellers. They are all isolated observations, and are given for what they are worth.

Place.	*Date.*	*Time.*	*Altitude.*	*Temperature(F.)*
Karadagh (S. of Susuz Dagh)	1st July	10–11 a.m.	850 ft.	100·4°
6 miles W. of Yenije Kahve	16th Nov.	Noon	1,076 ft.	59·0°
Dilevli (NE. of Elmaly)	18th Nov.	Noon	3,307 ft.	61·2° in the shade. 90·3° in the sun.
Ebejik (N. of the Kartal Dagh)	10th May	8 a.m. later in the day	3,800 ft.	54·5° 68°
Chaush Köi (ESE. of the Beyshehir Lake)	17th Oct.	6 p.m.	4,131 ft.	53·6°
Seidishehir	16th Oct.	Noon	3,714 ft.	51·8°
BozkyrMaden(Siristat)	15th Oct.	5 p.m.	3,707 ft.	60·8°
Assar Kalesi (ruins of Isaura)	15th Oct.	Noon	4,593 ft.	55·4°
Sary Oghlan	14th Oct.	5 p.m.	4,923 ft.	51·8°
Turaida	13th Oct.	Noon	1,706 ft.	57·2°
Perchin Yaila (SW. of Eregli)	20th July	Sunrise	? 6,350 ft.	48°
Hamza Yaila (SW. of Eregli)	21st July	Sunrise		47°
Kyzyl Liman (E. of Cape Anamur)	6th Nov.	Noon	223 ft.	67·1°
9 miles N. of Selefke	31st Oct.	Noon	262 ft.	75·6° in the shade. 112·1° in the sun.
Kash Köi (SE. of Mut)	30th Oct.	Sunset	1,764 ft.	69°
Yapanly (5 miles N. of Mut)	6th July	4 p.m.	1,007 ft.	106·4° in the shade.
Kadyköi (W. of Yapanly)	29th Oct.	Noon	360 ft.	71·6°
Bostan Su (in the Gök Su valley between Ermenek and Karaman)	25th Oct.	1 hr. before sunset	1,764 ft.	72·1°
Kemranly (SW. of Karaman)	25th Oct.	Noon	4,700 ft.	64·4° in the shade. 100·2 in the sun.
Kirlün Boghaz (between Eregli and Bozanti)	5th Oct.	Noon	4,521 ft.	72·7°

Vegetation

The region as a whole may be divided (according to elevation) into four well-defined botanical zones. Within these zones there are local variations, due to the nature of the underlying rock or to other special conditions.

The first of these zones includes the great maritime plains and valleys from the sea to an elevation of about 1,500 ft.; the second includes the seaward slopes from an elevation of 1,500 to nearly 3,000 ft., and the yailas or highland valleys which open out towards the coast. The third is the great inland region of sub-alpine plains, elevated from 3,000 to 5,000 ft. above sea-level, and in some places presenting a uniform vegetation to an even greater height. A fourth botanical region is that of the mountain-peaks and ranges from 6,000 to 10,000 ft. high which form the walls of the table-lands.

I. *Region of the maritime plains and valleys.*—The vegetation of this zone is characteristic of the Mediterranean shores in general. Oaks, oriental planes and various kinds of pines constitute the forests, and the herbaceous vegetation exemplifies the commoner European families. On the rocks by the sea-shore great bushes of tree spurge stand out. These extend up the hill-sides, in association with the castor-oil plant and shrubby *Labiatae*. Along the marshes at lower elevation the great reed (*Arundo Donax*) flourishes in miniature forests, and it is used, together with the Christ thorn (*Paliurus echinatus*), to fence the fields on the alluvial plains. On the low hills bordering the plains, the myrtle, *Arbutus*, *Daphne*, *Phlomis*, *Styrax*, *Cistus*, and lentisk form, with the *Elaeagnus*, oleander, chastetree and *Colutea* (conspicuous on the edges of the plains), the main shrubby vegetation. Here also the pine is found, with the wild olive. The juniper (*Juniperus Phoenicea*), spiny burnet, and spiny chicory occupy the waste places.

Evergreen valonia oaks and Barbary holm oaks (*Quercus Aegilops* and *Q. Ballota*) and a smaller deciduous species (*Q.*

infectoria) are fairly common ; oriental planes give abundant shade near the villages. The cypress, bay and Judas-tree flourish in the ravines. The almond and manna-ash grow wild among the rocks. Pomegranates are abundant, and the mastic, fig and mulberry, both cultivated and wild, are not infrequent. The orange and lemon are cultivated. Melons, cucumbers, sesame, maize, cotton, capsicum, lentils, kidney-beans and balmias (*Hibiscus esculentus*) are also grown.

II. *Region of mountain-slopes and seaward uplands.*—This is the zone of the oak and pine forests. It is botanically a region of transition in which the flora of the sunburnt lowlands is mingled with more temperate forms and with the characteristic plants of the plateau. It abounds in species of broom. The dwarf holly-oak (*Quercus coccifera*) is common. The walnut is the most conspicuous tree near the villages. Maples are frequent, as are also willows, the *Agnus castus*, the tamarisk and the carob. Vineyards and tobacco-fields give an abundant yield.

III. *Region of the yailas.*—The centre of these plains is usually bare and treeless except near the villages, which are surrounded by poplars, pollard-willows, walnut-trees, apples, and apricots. Planes are comparatively scarce. In some of the less elevated yailas large oaks and elms are met with, but the forest belt is commonly of pines. The vine is grown on some of the upland plains. The chief cereal crop on the yailas is wheat.

IV. *Region of the mountain-peaks.*—The chief tree on the lower slopes here is the pine, often called the cedar by travellers. Between 6,000 and 8,000 ft. the *Juniperus excelsa* is abundant, but grows gradually sparser higher up as the snow-line is approached.

Fauna

Trout from ½ to 1½ lb. are found in most of the streams wherever the water is clear and cold. They take the fly readily. In some of the lower reaches 4-lb. trout have been caught. In the Dalaman Chai district there are coarse fish

in the rivers, land- and water-tortoises are abundant, and land-crabs are found round the sulphur springs.

Salmo ferox or a similar fish is said to be found in the mountain lakes.

Swans, geese, bitterns, plovers, godwits, curlews, shanks, ibis, and other wading birds are common in suitable localities. The swamps which occupy parts of the lower river-valleys and the lakes or marshes lying in many of the upland valleys are the haunts of many varieties of duck and other wild-fowl. Snipe are found in the upland marshes in September, and descend to the lower grounds for the winter. Francolin and quail are fairly common in the warm low land, woodcock in the forests, and the red-legged partridge abounds on the rocky hills.

Hares (considered unclean by the Takhtajys) are generally found wherever the ground is rocky or stony, and foxes are plentiful. The fallow-deer frequents the wooded or scrub-covered hills of Lycia. The wild goat is fairly common on the Musa Dagh (NE. of Cape Khelidonia) and on the mountains above Bashkoz. Wild sheep are met with in the hills near Makri, in the Pisidian mountains, and in Low Taurus. The jackal is frequent, especially in the warm coast lands, and the wild boar is found wherever the conditions are favourable.

Population

Origin and History.—Throughout the chequered history of Asia Minor, this area has generally been a land apart, lying off the main channels of communication and movements of population, living a life of its own. In the Persian, Greek, and Roman periods, it comprised the districts of Lycia and Pamphylia, with parts of Pisidia, Isauria, and Cilicia Tracheia. The modern population show many traces of the isolation and independence of their ancestors in ancient times.

The ethnical affinities of the early populations of these districts are obscure. The Lycians attained a high degree of material civilization in quite early times ; the other mountain tribes retained their uncouth manners and turbulent spirit throughout the period of Greek and Roman civilization.

The mountaineers of Pisidia, in their cities on the crags (of which many can be seen to this day), maintained their independence during the Persian domination of Asia Minor, and were first reduced by Alexander the Great, to whom they offered a fierce resistance. On the consolidation of the Roman Empire in central Asia Minor, about the beginning of the Christian era, they were kept in subjection by means of a series of military roads and colonies based on Antioch (Yalovach) in the N. They spoke their own language until it was extinguished by the Greek of Christianity. Byzantine history contains records of their turbulence, and although the writ of the Sultan now runs among them, they are treated by the Turkish police with much greater respect than the docile inhabitants of the plains to the N. and W.

The small ships of the ancients liked to hug the coast and put in at a harbour whenever possible, and the coastal cities of Lycia and Pamphylia took full advantage of their position on the sea route from the Aegean to the eastern Levant. The ruins show that these cities were numerous and prosperous in the Greek and Roman periods. In the later Byzantine period, from the thirteenth to the fifteenth centuries, when Asia Minor was the scene of continuous battles between the Byzantine Emperors and the Turks, and when there was no united authority on the peninsula, the Venetians and Genoese took advantage of their intermittent command of the sea to found colonies along the coast of Asia Minor. The traces of their domination of the S. coast are still visible in the castles and fortified trading posts from which those colonists controlled the coastal area and a considerable part of the hinterland. These ruins show that the Latin domination was extensive and fairly permanent. There is little record, other than the ruins, of this occupation. The colonies governed themselves, appointed their own authorities, and accepted no dictation from the mother cities. As the Osmanli power became consolidated, the importance of the Latin colonies decreased, and after the capture of Constantinople by the Turks, the trading posts were gradually abandoned.

Composition.—The settled population of this area is largely indigenous, descended from the pre-Turkish inhabitants. Most of them have adopted Islam, at least outwardly. The 'Greeks' are mostly indigenous inhabitants who have retained their Christianity; there are also a few recent immigrants. Some of those classed as Moslem, e. g. the mysterious Takhtajys, a community of woodcutters and charcoal-burners, have religious rites which appear to be derived from the old pre-Christian cults of Asia Minor, and are despised by the Turks as unorthodox, although not treated as Rayahs like the Greeks or Armenians. Their women go unveiled; marriage between brother and sister is permitted, but is not common; the hare and the turkey are regarded as unclean; and the word 'sheitan' (devil) must not be pronounced in their presence.

The immigrant element is represented by the Yürüks, a semi-nomad tribe, who live mainly on the produce of their sheep and goats, by the Armenians who come to trade, and by a sprinkling of Levantines, Jews, and negroes round the coast. As a whole the population is industrious, sturdy and independent, courteous and hospitable. Their main industry is agriculture.

Density.—On the S. coast the density of the population is about 100 to the square mile; in the mountain area it may be about 40 or 50. According to the rather unreliable Turkish *Annuaire* (1914) there are in the Sanjaks of Teke, Buldur, and Ichili, which comprise the greater part of the area covered by this Handbook, 290,222 Moslems and 59,767 Christians.

Language.—All, Moslems, Greeks, Armenians, Levantines, and Jews, speak Turkish. Many, but not all, of the Christians speak their own language as well.

Religion.—The bulk of the population, probably as much as 90 per cent., is classed as Moslem, but in the case of the Takhtajys and Yürüks this is largely a courtesy title. The Greeks—if we except some Greek-speaking Moslems at Isbarta—are all members of the Orthodox Church.

For further information of a general character, see vol. i.

Trade and Industry

Agriculture and fruit- and tobacco-growing are the main occupation of the Moslem population, and the larger towns such as Adalia, Elmaly, Buldur, Isbarta, Egerdir, Konia and Karaman export a considerable amount of the produce of the districts in which they lie. Most of the smaller places grow only enough for home consumption. (See also Gazetteer of Towns, pp. 139 ff.)

All districts raise flocks and herds but in most cases only sufficient for local needs.

A considerable trade in timber is carried on, and some of the larger rivers such as the Dalaman Chai are used for floating the logs down to the sea. Egypt receives most of the export in wood.

Retail trade is mainly in the hands of the Christians. The Greeks control most of the sea-borne traffic and also carry on a considerable trade with the interior.

Industrial concerns are confined to the important centres, and in most of these there are branches of the chief eastern banks as well as some belonging to British, French, Italian, and German companies. (See Gazetteer of Towns, pp. 139 ff.)

The main local industries of the smaller places are the making of carpets and the manufacture of cotton goods.

Communications

Roads

There are few natural lines of communication throughout this region. Within the area itself there is not, and never has been, any question of traffic going E. and W. Traffic moving in these directions makes for the central trade route (now represented by the Anatolian and Ottoman railways) or for the sea at the nearest point. As an alternative to the railway route W. of Konia, it may join the shorter road from Konia to Dineir via Yalovach.

Traffic going N. and S. passes up or down the river valleys over the cols of the Taurus system. Many of the rivers, of

which the Taurus range forms the watershed, have to force their way through narrow valleys or gorges which leave little or no room for a road. And as the outliers of Taurus extend nearly everywhere to the sea, communication between the towns on the sea-board has always been carried on by water rather than by land. The only maritime plain of any extent is that of Pamphylia (see above, p. 32), through which runs the first stage of the main road from Adalia to Konia. From the point where the chaussée turns N. an indifferent road continues SE. as far as Alaya. Beyond Alaya, except over stages usually short, the roads eastwards along the coast are merely horse-tracks, the mountains of Cilicia Tracheia, like those of Lycia to the W., rendering wheeled traffic impracticable without considerable outlay on road-making.

I. The Lycian promontory should perhaps be considered by itself. It opposes a serious barrier to land-communication between the lands of the W. coast and Pamphylia. The lofty mountains which tower over the gorge of the Dalaman Chai prevent direct communication with the Smyrna region. The few roads from the W. keep either towards the S. (e.g. that from Mughla to Makri) or ascend the Maeander valley and then strike SE. through the Taurus watershed (e.g. the road from Denizli to Adalia).

Lycia possesses no metalled roads, but the track from Makri E. into the Xanthus valley is not difficult and there are not many obstacles to a route up the Xanthus valley itself except the fairly numerous streams which have to be crossed (see Route 3).

The chief meeting-point of roads in Lycia is Elmaly, from which routes run to Denizli (a fairly easy road), to Makri (via Ören and the Xanthus valley or S. of the Ak Dagh), to Fineka, and to Adalia. All of these run through mountainous country and none of them is metalled except where it coincides with the chaussée from Denizli to Adalia (Route 11).

II. Adalia forms a meeting-point of several routes from Denizli and places lying E. of it. The road from Denizli has always been that most frequently used from the upper

Maeander valley. Even it, however, is difficult, and the evidence available is insufficient to show whether it is used throughout by wheeled vehicles. In addition to this route there are roads from Buldur, Isbarta, Egerdir and Konia. The first of these is a carriage-road, and in 1908 most of it was metalled. From Isbarta there are two roads apparently in common use but it is uncertain whether they are used for wheeled traffic. The road from Egerdir is probably only fit for pack-transport. It is described as rough and difficult through the mountains, and the streams which it crosses are in many cases unbridged. (See Route 14.)

The main road from Konia to Adalia was not completed as a chaussée in 1907. For a considerable distance S. of the Beyshehir lake it was simply a track in that year, and it was reported that as the construction of a carriage-road over this stage would be difficult and expensive there was little prospect of its being undertaken in the near future.

III. Inside the area enclosed between the northern boundary of the region under consideration from the Beyshehir lake through Konia to Karaman and a line from Beyshehir through Siristat to Karaman there are numerous cart-roads through the foothills. In connexion with the works undertaken for the irrigation of the plain of Konia a carriage-road has been constructed which starts from Beyshehir and runs along the banks of the canal down the Charshembe gorge to the Konia plain. The existing bridges have been repaired, and substantial ones of iron girders on masonry abutments and piers erected where the new canals cross existing roads. On the Konia plain, roads have been constructed along the banks of main and secondary canals, and the more important ones, where stone is available, provided with a metalled roadway.

There is also a road fit for wheels from Konia to Siristat via Khatyn Serai and Mai. South of Mai it is very difficult.

A detailed description of the routes in the country between Konia and the Taurus range will be found in vol. iii, part 2, of this Handbook.

IV. The various routes from Akseki or Siristat towards the

S. are only fit for pack traffic, and Karaman may be taken as the starting-point of the main roads on the E. These run W. towards the Isaurian mountains, S. into Cilicia Tracheia, or E. along the Taurus range. The roads into Isauria and Cilicia Tracheia are for the most part simply horse-tracks through mountainous country very thinly inhabited. The earthwork of a chaussée has, however, been laid down from Karaman to Mut and Selefke, and in 1908 this route formed a good pack-road. It was, however, much obstructed by boulders and largely unprovided with culverts, though Turkish officials stated that it was proposed to make it fit for wheels.

Between Mut and Selefke a route branches from this road to Ermenek (see Route 27). This was begun as a wagon-road, but it is not known whether it has been completed. The roads from Ermenek towards the N. or S. are fit only for pack-transport.

The other main-road between Karaman and Selefke is Said Pasha's chaussée, which lies E. of that mentioned above. This road, however, has been little used as the country through which it passes is badly provided with water and other supplies. Through neglect it has become in places almost impassable for wheels, especially between Maghara and Selefke.

V. The Baghdad railway now runs from Karaman through Eregli, Ulukyshla and Bozanti on its way through Taurus, and the plain-country between Karaman and Eregli offers few obstacles to wheeled vehicles except the marsh round Sidrova. Beyond Eregli as far as Ulukyshla the road is fit for wheels, and beyond Ulukyshla to Bozanti Khan is as good as a Swiss diligence road. It is, however, liable to be blocked by snow in winter.

From Eregli a fairly easy road leads S. over a plateau between 6,000 and 7,000 ft. high to Maghara. This could probably be made fit for wheels without much difficulty. From Maghara a regular caravan-track runs to Lamas on the coast.

The Dümbelek Dagh (see p. 12 f. above) has been little

explored but there are several tracks over it from Karaman or Eregli towards the S. The route generally followed passes round its eastern end over the Dümbelek Bel, which separates it from the Bulghar Dagh on the E. The latter range is much more difficult. Apart from the great road through the Cilician Gates there is said to be only one route in common use in this region. It runs from the mines at Bulghar Maden through the depression separating the Kyzyl Tepe from the Bulghar Dagh. Thence it crosses the pass in the main ridge called the Koshan Bel and runs to join the chaussée through the great Taurus pass.

There are also tracks through the Aidost Bel, W. of the Koshan pass and through the Khoja valley E. of it. The Aidost pass route appears to be of some importance.

For the routes in this eastern region see vol. iv, part 2, of this Handbook.

Railway Projects

Railway schemes to serve the region under present consideration have at various times been brought forward. Beyond Egerdir surveys were being taken in 1914 for an extension of the Ottoman Railway to Konia. Branches of the same line have also been projected from Baladiz N. of the Buldur lake to Kyzyl Kaya S. of the Kestel lake.

For the southern district, schemes for lines under Italian control have been considered. One of these was to run from Makri to Mughla. Another branch was to run from Makri into the Xanthus valley, which was itself to be tapped by a line running N. and S. throughout its whole length as far as Ören.

Farther E. a line has been planned from Kaz Chiftlik through Elmaly to Kyzyl Kaya, with a branch from Kyzyl Kaya W. to Fughla. Still farther E., Adalia naturally must be the chief terminus on the coast, and the question has been considered of constructing lines from here NW. to Kyzyl Kaya and E. to Alaya, the latter with a branch through Sarylar up the Menavgat Chai to Akseki.

Harbours

Although not deficient in good harbours, this region is ill-provided with seaward communications. The better harbours have usually no hinterland; on the other hand, the small maritime plains have no good harbours. The only places with a considerable sea-borne traffic are Adalia and Makri; Makri taps the Xanthus valley over an easy pass, and the trade of Adalia extends far inland. But the port of Adalia is only an open roadstead. Sheltered harbours like Casteloryzo, while their strategic importance may be considerable, are cut off from the interior by inaccessible mountains, and can have no commercial future. Selefke, Kilindria, Alaya, Adalia, and Makri are visited by small coasting steamers and sailing craft. Trade is carried on mainly with Cyprus, Syria, Egypt, Smyrna, the Greek islands, Trieste, and Marseilles.

Supplies and Transport

Supplies in considerable quantities are obtainable on the coast only at Adalia (see p. 140). Smaller amounts may be had at Makri (during the winter months), Alaya, or some of the other towns or villages mentioned in the Gazetteer of Towns.

Of the inland towns S. of the watershed Elmaly (see p. 143) is the sole depôt of importance, though Ermenek could probably produce a limited quantity of supplies (see p. 145).

N. of the watershed Konia is the chief centre (see vol. iii, part 2), but considerable supplies are also procurable at Buldur, Isbarta, Egerdir, Karaman, and Eregli (see Gazetteer).

Firewood is to be found nearly everywhere, and water is generally plentiful on all the main routes except Said Pasha's chaussée (Route 37).

There is little information regarding transport. Owing to the scarcity of metalled roads pack-transport by ass, horse, mule, or camel is generally adopted, but no details can be given as to the number of animals available in particular districts.

Telegraph System

A wire from Mughla on the trunk-line Dardanelles–Marmaris runs through Makri and thence SSE. to Gelemish.

Ajy Padem, Buldur, Isbarta, and Egerdir are all stations on a wire from the Dardanelles–Marmaris main line at Aidin connecting at Akshehir with that from Constantinople to Konia, Adana, Tarsus, and Aleppo. A branch from this wire runs from Isbarta to Ulu Borlu.

From Adalia lines run W. to Elmaly, N. by W. to Buldur, and E. by S. to Menavgat and Alaya. From Menavgat a branch runs NE. to Akseki.

Beyshehir is connected ENE. with the trunk-line at Konia and SE. with Seidishehir and Siristat.

Selefke is the meeting-point of lines from Karaman through Mut (whence there is a branch to Ermenek), from Anamur through Gulnar, and from Tarsus on the Constantinople–Konia–Adana–Aleppo line through Mersina.

It has also been proposed to connect Elmaly with Makri, Gelemish (through Andifilo) and Fineka; Buldur with Tefeni; Alaya with Ermenek and Anamur; and Siristat with Ermenek. There is no evidence to show whether any of these schemes have been carried out.

ROADS AND TRACKS

SUMMARY

Route No.		PAGE
1.	Makri—Levisi	51
2.	Makri—Günük, via Minara	51
3.	Günük—Makri, via Düver	54
4.	Günük—Dembre	56
5.	Kekova—Adalia	59
6.	Elmaly—Makri	63
7.	Elmaly—Makri, via Ak Dagh	64
8.	Elmaly—Fineka	65
9.	Elmaly—Adalia	66
10.	Denizli—Elmaly	67
11.	Denizli—Adalia	69
12.	Buldur—Adalia	72
13.	Isbarta—Adalia	76
14.	Egerdir—Adalia	80
15.	Konia—Adalia, via Kara Baulo	83
16.	Konia—Adalia, via Kessik Bel	86
17.	Adalia—Selefke	92
18.	Adalia—Akseki	97
19.	Alaya—Akseki	97
20.	Akseki—Beyshehir	97
21.	Siristat—Beyshehir	97
22.	Siristat—Alaya	98
23.	Ermenek—Siristat	102
24.	Ermenek—Selinti	104
25.	Kilindria—Ermenek	106
26.	Kilindria—Mut	106
26A	Kilindria—Selefke, via Gök Belen	106
27.	Selefke—Ermenek	107
28.	Mut—Ermenek	107
29.	Ermenek—Selefke	110
30.	Selefke—Mut	112
31.	Selefke—Mersina	117
32.	Maghara—Lamas, via Ura	120
33.	Lamas—Maghara	121
34.	Karaman—Siristat	122
35.	Karaman—Ermenek	123
36.	Karaman—Selefke	125
37.	Maghara—Karaman	129
38.	Eregli—Karaman	131
39.	Eregli—Maghara	133
40.	Bozanti Khan—Eregli	134

ROUTE 1

MAKRI—LEVISI

About 6 miles

THIS track at first enters a gorge E. of the castle and ascends precipitously up slopes covered with brushwood. Half-way up the heights a good spring called **Sipman** is passed. On the summit (1 hr. 20 mins.) are a cistern and tombs. The track then enters the plain of Levisi (about 560 ft. high), surrounded by mountains which rise above it to a height of from 500 to 1,300 ft. and cut off the view of the sea. The plain curves to the N. and on the curve lie the miserable villages of **Gechiler** (to E.) and **Pelengi** (to W.). To W. is a somewhat larger village, **Monastir Karyesi,** below a sharp conical mountain.

At 20 min. from the summit a Turkish cemetery is passed, and **Levisi** (see p. 148) is reached 15 min. farther on.

ROUTE 2

MAKRI—GÜNÜK

Via MINARA, 35½ miles

This route is for the most part simply a track over hilly country.

The distances given below are in nearly every case taken from the map and can only be regarded as approximate. Details also are lacking for the calculation of gradients.

For an alternative route from Makri to Minara see A below.

miles	
0	**Makri.** Travel E. along S. edge of great plain, which is not cultivated far inland; the path soon runs over a stony heath.

miles

2¼ Pass Turkish cemetery belonging to village of **Ködörlö.**

Pass a dry brook which may run to the river that debouches at Makri.

6½ Bend SE. and pass a kiosk between two plane-trees near a cistern (alt. 197 ft.).

7¾ Pass through cemetery of **Dont.** Thence ascend through pine-woods to village of

11¾ **Gyöben** (alt. 1,411 ft.). Continue over eastern outliers of **Mendes Dagh** up and down hill in S. direction, amid oak and plane trees, to fertile plain of

17 **Kaba Aghach** (alt. 492 ft.).

20 **Minara** (alt. 984 ft.), lying at W. corner of a plain parallel to that of Kaba Aghach, which gradually slopes down to the banks of the Xanthus 2 hrs. away. Water plentiful, from a stream. District fertile, growing figs, oranges, citrons, quinces, oleanders, and pomegranates. 30 min. to W. in mountains, ruins of Pinara. Cross towards S. two valley-like indentations of the Xanthus plain which are formed by low outliers of the western range. These valleys are fertile and fairly well cultivated. In the southern of them pass **Yakabagh** to W. and

24 **Kestep,** to SE. in the direction of the Xanthus (alt. 558 ft.), 50 houses inhabited by Greeks; seat of a mudir.

To the S. an undulating row of hills rises beside the river bank and along it runs the road generally followed to Xanthus.

Present route turns to r. into large valley running E. and W., ¾ mile broad, with steep walls thinly wooded. It forms the division between Kragos and Antikragos. Valley partly cultivated: brook dry (May).

26¾ Group of huts called **Dereboghaz** (2 miles from top of valley) with large vaulted cistern. Thence the sea may be reached by Akyaka, Avlan, and Sanjakly.

miles

Continuing S. on a broad terrace, cross the hilly country which extends from Mt. Kragos to the river, and reach village of

30¾ **Chukur Injere,** in a small plain surrounded by hills beside the river, which here makes a great bend to the W.

Thence over a long plateau clad with old pine trees, passing a ruined building with blocks scattered around.

32¾ **Karaköi,** with a mediaeval fortress on the peak of a hill. No bridge: river-bed narrow and deep. The plain is intersected with trenches, 6–10 ft. deep, for irrigation purposes, which may be crossed on culverts of brushwood.

Track now winds S. through brushwood which here is tree-high.

34½ Ford river: opposite bank is 10–14 ft. high, but a passable opening is near at hand. Continue N. on l. bank to

35½ **Günük,** the modern representative of Xanthus; 30 stone huts and a few small houses hidden among trees and gardens; mosque with a flat earth roof; no minaret. River here about 45 yds. broad.

A.

Makri to Minara. The following is a rather shorter but more difficult route:

miles

0 From **Makri** travel SE., ascending gradually to the broad high plain of

5 **Ovajyk** (alt. 1,200 ft.), between the **Mendes** and the **Buba Dagh.**

Thence cross several deeply furrowed spurs of Mendes and ascend a gorge.

9 Summit, 4,176 ft. Turkish cemetery and cornfield. From the deepest part of the gorge the two mountains rise in quite different ways. Mendes Dagh rises

miles

sharply to 1,300–1,600 ft. and then recedes so that in the pass only the fore-heights are visible: Buba Dagh rises but slightly at first, but then towers precipitously like a smooth wall, stretching from NW. to SE., the lower 300–600 ft. bare, higher up covered with cedars. The top is precipitous and bare.

Beyond the pass, moderate and gentle slope downwards through low brushwood to

14 **Dip** (or **Diep**) (2–3 hrs. from the summit), shady trees and a copious spring.

16 Difference between two sides of valley, which has continued up to now (¾ hr. beyond Dip), ceases, and both Mendes and Buba Dagh are precipitous with equal heights.

Turning SE. pass several small plains embedded in outliers of the Buba Dagh before reaching larger valley-plain of

19 **Minara.**

ROUTE 3

GÜNÜK—MAKRI

Via DÜVER, 37 miles

This route appears to present no special difficulties. Water is plentiful from streams, and there is abundance of fuel. As far as Düver the track passes through country with a good many villages, and the Xanthus valley is fairly well cultivated.

Beyond Koch Oghlan (mile 24) the path rises through pine-woods with few habitations.

Details are wanting for the calculation of gradients, but none of them appear to be difficult.

The distances given below are taken from the map. Where the original authority gives the times taken over different stages these have been noted in the text.

miles	
0	**Günük.** Track runs NE. past ruins of ancient town of Xanthus.
2	Pass ruins of a building with Corinthian pillars lying amid brushwood (½ hr. from Günük).
5	An imposing ancient wall runs across valley from E. to W. It begins about 650 ft. above the plain on the lower slope of Massikytos (Ak Dagh), and runs for an hour's distance without interruption to an insignificant hill which rises beside the river. This hill was fortified in ancient times, and from it the wall continues W. as far as the river, thus completely blocking this side of the river.
	Balamut village (2 hrs. from Günük).
	(The route map of the original authorities places the ancient wall about 1 mile S. of Balamut and the village about 1 mile to r. off the track.)
6¾	The **Mangyr Chai,** crossed without difficulty.
	There follows a series of brooks flowing down from the snows of Ak Dagh.
11½	To r. far up the height the ruins of Arsada.
	Track runs through thick brushwood in the valley plain, across which run many streams.
16½	**Düver** (alt. 531 ft.), on the E. edge of the valley plain; prosperous village with old konak in which the Kaimmakam of Makri used to reside; konak is now deserted. Forest-covered ruins of Tlos about 3 miles (1¼ hrs.) to E. (alt. 1,506 ft.).
	From Düver descend W. over irrigation trenches and fields past a hill crowned with ruins to river Xanthus and cross to
19¼	**Koch Oghlan (Kojiolan).**
	Thence ascend small stream-valleys and over eastern outliers of **Mendes Dagh** covered with desolate pinewoods to
29¼	**Dont** village (see Route 2, m. 7¾).
37	**Makri.**

ROUTE 4

GÜNÜK—DEMBRE, 58 miles

The general account given of Route 2 applies to this track also.

For an alternative track from Furnaz to Kash Kassaba see A below.

miles	
0	**Günük.** Track runs S., past tombs; then over fields, heath, and finally through brushwood.
2¼	Reach marsh which fills whole SE. corner of the valley. Marsh is not deep and could easily be drained if the brooks which feed it from E. and W. had proper beds constructed to lead them into the Xanthus. Across it runs an elevated path of massive mortar-work about 3 ft. high and 7 ft. broad, with a stone parapet about 3 in. high on each side. In the deepest part of the marsh it forms a vaulted bridge.
	After crossing this turn to l. (A track runs S. from this point to **Gelemish** and ruins of Patara.)
	Skirting the N. foot of the coastal mountains pass two ruins on l. and reach
7	**Furnaz,** village with gardens in the E. corner of the Xanthus plain.
	From here ascend SE. to the saddle (650 ft.) between the **Örendagh** (about 1,600 ft.) on r. and **Kyshladagh** (over 3,200 ft.) on l. Thence long easy descent to
11	**Kalamaki,** Greek village of 60 houses on the sea.
	Thence continue SE. up the slope to
12¾	**Bazyrghyan Köi** (980 ft.) on the edge of the five hills which border the bay of Kalamaki to the E. Thence by mule-tracks up the S. slopes of the coast wall with a continuous view of the sea.

miles

Farther up pass through pine-woods, and turn into pass of **Sedek Yaila** (2,600 ft.), in whose rocky depths the waters of Kaputash Deresi run down to the sea.

17¼ Summit of pass 3,215 ft. Continue close under the crest of the coast wall through various small depressions (summit 3,600 ft.), past a small ancient settlement, to the saddle-valley of

22 **Süret,** running N. and S. (alt. 3,085 ft.). The valley is about ½ mile broad; its high mountain walls are clad with conifers, and on the level are meadows and fields with a few oaks and poplars. Süret, about a dozen stone huts, 20 barns and a mosque, is scattered over the E. side of the valley.

Thence ascend E. valley wall (summit 4,200 ft.). Several hundred ft. higher to l. rises the crest of the coast wall which forms watershed towards the valley of the Fellen Chai. To r. a parallel range of lower fore-hills which cut off view of sea. In front lies a basin-like enclosed valley cultivated in places, with rye growing wild. Ruins of ancient settlements. Continue about same elevation and cross several similar valleys till the fore-hills suddenly cease and the sea appears below the mountain wall. Descend by a winding track for about 500 yds. Then turn inland in NE. direction up a broad pass-valley which leads from Andifilo into the plain of Kash.

31 **Chukurbagh** (alt. 1,970 ft.). Thence still in the same valley, past the villages of **Orta Köi** and **Bunarbashy** to a height of 2,130 ft. Thence descend through splendid woods with many springs to the large upper Dembre valley-basin.

40 **Kash Kassaba** (alt. 660 ft.), on the banks of the Yailany Chai; chief place in the upper Dembre valley; 100 houses and huts among trees; bazaar consisting of a few booths; domed mosque with minaret and large khan; miserable konak, the residence of a Kaimmakam.

miles

Thence down l. bank of **Fellen Chai** to its junction with the **Ernez Chai** at

45 **Dere Aghzy,** whence descend the right bank of the united river, now called **Dembre Chai,** to

58 **Dembre.** This last stretch is only passable in summer, as in winter floods fill up the whole valley floor, and caravans have to take the laborious road over the Dembre plateau by **Gölbashy** and **Sura.**

A.

Furnaz to Kash Kassaba.

0 From **Furnaz** track runs up the N. side of a valley (? to NE.), crossing several brooks on which are mills, owned by Greeks.

3 **Öz Köi,** then still up the valley to

5 **Potamia** (Turkish **Islamlar**) (? to l.).

6½ Summit 4,460 ft. (3 full hrs. from Furnaz in the reverse direction), overgrown with pines and oaks, high brushwood and broom. Thence descend to

7 **Köibashy** or **Köibaghche** (alt. 2,990 ft.), at the NW. end of Bazyrghyan Yaila, inhabited by Yürüks. The yaila is a well-cultivated plain 2 miles long and 1 mile broad, which extends flat as a table and is fringed by high mountains (alt. 2,560 ft.).

9½ Rise over a crest projecting from N. to S. (alt. 3,180 ft.), and ascend the side of the Fellen Chai valley.

Thence up and down over high hill country (summit 3,600 ft.), through a thick forest of old oaks (the Eunias Nemus in antiquity), to

23 **Gendova** (alt. 2,600 ft.), on a dominating cone of rock; tiny village near ruins of ancient Kandyba. Inhabitants remove in summer to a yaila where there is better water and more plentiful fodder.

Thence SE.

27½ **Kash Kassaba** (about 2 hrs. from Gendova).

ROUTE 5

KEKOVA—ADALIA, 95½ miles

This is a rough hill track most of the way. There are a good many steep ascents and descents.

The country through which the route passes appears to be well wooded, but in summer suffers in places from scarcity of water (e.g. between mile 21½ and mile 30½).

The distances given below are in most cases taken from the maps. The times taken over different stages have, where available, been noted in the text.

miles	
0	**Kekova,** splendid harbour. Cross fields to E., into small plain E. of **Tristomo** bay; thence by a cleft past a mediaeval castle, **Burj Kalesi,** by the sea, to
2½	**Yaly Bay,** shut in by bare mountains and protected from the sea by reefs and a few islands.
3	Small ruined church in the inmost corner of the bay (1½ hrs. from Kekova); from this point the ascent begins over deeply cleft rock, in places overgrown with bushes, on paths which are little used; moderate gradient.
	Pass ruins of an ancient town in a small depression among thick vegetation. The plain is about ½ mile long and lies 200 ft. above sea-level. Probably the place was in ancient times Istlada, now **Aidle** or Haidle, and belongs to Isindipi village, 1 hr. to NW., farther up in the mountains.
4	Plain, 2½ miles long, with large cornfields (alt. 330 ft.); several cisterns of cylindrical or bottle shape. At the farthest ends of this plain lie the villages of **Kapakly** (to E.) and **Isindipi** (to W.); it is the last terrace beneath the towering mountain wall of the Dembre Plateau.

miles

Ascend this wall by a toilsome zigzag path to summit (alt. 1,300 ft.); ruins scattered over plateau S. and W. of present village of **Hoiran.**

Continue over rolling plateau, past villages of **Divle** and **Nassyf** (only a couple of farmsteads each).

7½ W. foot of the mountain (? 2 hrs. from Isindipi plain); a few ruined huts with two old cisterns. The place is called **Gölbashy.** Saddle of mountain of Gölbashy can be reached in 30 min. Larger village of **Gebren** ½ hr. distant.

Track now crosses the hills into the **Dembre** valley and turns upstream. In July the river contains a few pools; broad floor of valley filled with gravel; vegetation still fresh; oleanders along the water-course; myrtles, laurels, and arbutus on the valley-walls; great masses of rock towards the exit from the valley.

17½ **Dere Aghzy,** point where the **Ernez Chai** and **Fellen Chai** unite (2½ hrs. from Gölbashy).

18½ Byzantine basilica (3 hrs. from Gölbashy). Turn NE. up smooth sandy bed of Ernez Chai, ½ mile broad; rapid ascent; flourishing oleander and myrtle bushes, in places plane-trees and, farther up, pines.

21½ **Karadagh,** with kiosk standing under a holm oak, facing the **Susuz Dagh** to the N.

Karadagh lies at exit of **Chaman** valley, which comes down from **Alaja Dagh**: it is a large and prosperous village.

Thence ascend ridge which runs NW. and SE., uniting the higher parts of Susuz and Alaja Dagh, and gives approach into valley of the **Bashkoz Chai** by the pass of Yazyr.

Immediately above Karadagh bend NE. up a dry tributary of the Ernez Chai, the **Kara Chai,** and reach wooded hilly country intersected on all sides by river beds. Gradual ascent with splendid views

miles

of the valley towards Kash. No water till Yazyr (mile 30½ below).

24½ Pass village of **Dalba Köi** (about 2 hrs. from Karadagh; wrongly placed in Kiepert) near a wood of oaks on the slopes of Alaja Dagh. Road, bordered with pines, becomes continually steeper.

30½ Summit (about 4 hrs. from Dalba Köi); a few huts belonging to the village of **Yazyr,** which lies about 1½ miles (½ hr.) down to NE.; the pass is a saddle-valley; floor ½–1 mile broad and fairly level, with cornfields. The N. wall of the pass is the steeper; on it is a deep fissure which leads up in one hour to the Yazyr Yaila (wrongly placed in Kiepert). Above it rises the **Ernez Dagh.** On S. slope a fine wood of conifers; peaks of **Ak Dagh** NE.

34 **Killepe** (2 hrs. from Yazyr summit), lying where the valley closes in to fall steeply to the Bashkoz Chai; springs; houses have two stories and wooden balconies; surroundings well cultivated, producing olive trees.

37½ Continue down to the deep wooded valley of the **Bashkoz Chai,** reached at the saw-mill of **Aruf** (2 hrs. from Killepe).

Then descend the river by an easy path through thick and high vegetation.

Cross river and ascend to E. Ascent rather steep, over rubble past the deserted village of

42 **Yalynyz** in the direction of the Derekyslar Chai.

Ascent now becomes more and more difficult in a grandiose cleft with conifers and towering walls; to r. the **Suin Dagh**; to l. the bare precipitous terraces of the southern **Ak Dagh.**

46½ **Belen Yaila,** summit (3 hrs. from the crossing of the Bashkoz Chai); no houses or inhabitants. Extensive view over Alaghyr region.

Road now leads up W. side of valley in NE.

miles

direction at a uniform height of about 3,900 ft. and at a gradually diminishing distance from the Alaghyr Chai.

49½ **Kozaghach** (less than 2 hrs. from Belen Yaila); dilapidated kiosk built near a copious spring; ruins of ancient Edebessos.

Pass high above **Kesteshek,** and reach

62½ **Kürje Köi,** village scattered among fruit-trees and gardens, lying low near the Alaghyr Chai, on a brook.

63½ Cross **Alaghyr Chai** (30 min. from Kürje Köi) on a wooden bridge near a mill. The river here is strong and broad, in a valley filled with plane-trees, the E. side of which is a steep rocky slope.

Ascend this slope (for 3 hrs.) to NE. through forest.

66 Summit at **Arslan Yaila** uninhabited; cornfields near the top. Ascend pass to **Chandyr** valley, which runs NE. into Pamphylia; to l. **Bereket Dagh.**

From Arslan Yaila gradual descent, passing several tributaries, at a distance of ½–1 mile from the river Chandyr.

74½ **Chandyr** village with a mosque in an amphitheatre of the mountains, surrounded by planes, poplars, and pomegranates.

Continue down valley over a better track. The valley gradually broadens so that the road runs along its floor; to l. the bare walls of **Sivri Dagh,** 2,000 ft.; to r. the sugar-loaf-shaped **Gurma Dagh,** at the E. foot of which lies

89 **Gurma,** scattered over the plain, with a mosque and a large *oda* (guest-house).

Hence journey along sea-shore, past extensive ruins of a town, crossing a swiftly flowing river, about 50 ft. broad, and finally along the rocky edge of the plateau to

95½ **Adalia.**

ROUTE 6

ELMALY—MAKRI

Via THE KUYULU BEL, 56 miles

This is a fairly direct track through mountainous country. At one point it rises above the oak-level (mile 25). There appear to be a good many steep ascents and descents (e.g. at miles 10, 12, and 30).

miles	
0	**Elmaly.** Track runs NNW.
3	**Kyshla,** small village at the W. foot of the Elmaly Dagh. **Yalynyz Dagh** is a solitary mountain about 2 miles distant.
6	**Eskihissar,** extensive ruins. Track now follows a narrow valley.
10	Foot of **Kuyulu Bel** (alt. 4,921 ft.); splendid woods. Track ascends the mountain.
12	Pass of Kuyulu Bel. Ancient ruins; the surrounding peaks appear to rise to 7,500–8,000 ft. Ascent continues.
15	Summit (alt. 6,430 ft.). Steep descent by a path strewn with boulders. Track crosses a small plain and then follows a well-watered steeply-sloping valley.
18	**Seyidler Yailasi** (alt. 4,127 ft.), at the S. foot of high mountains, among ancient ruins.
19½	Direction now W. down to the plain; to l. in the mountains the yaila of **Düver** and a little farther on, to l., **Küshmüshar.** The track then crosses a treeless plain, with the shallow **Ak Chai** on the r.
23½	Ascent over a hill to **Uluja Khan.**
25½	Track now runs past ruins of columns and buildings.
27	Foot of the **Karmaja Dagh.**
30	Track ascends the mountain as far as a valley

miles	
	which crosses it (alt. 2,788 ft.). Direction then WSW. with a slight ascent, followed by a very long and difficult descent by a zigzag path down the rock wall into the Xanthus valley. The track crosses the river by a wooden bridge.
34	**Ören** village (alt. 587 ft.), among orchards of mulberries, lemons, and oranges. Direction now SW. along the valley.
35½	Track crosses a broad shallow stream.
41½	**Seyidler** village to l.
43	Track turns W., leaving the Xanthus.
46	Gentle ascent up a well-wooded valley (alt. 475 ft.).
50½	Narrow gorge between serpentine rocks. Track then traverses a circular plain and crosses a long projecting spur into the plain of Makri.
56	**Makri.**

ROUTE 7

ELMALY—MAKRI, *via* THE AK DAGH

Several tracks run in a general SW. direction through the lower Elmaly plain. From the SW. corner of the plain it is possible to go either N. or S. of the Ak Dagh. The northern route goes by **Ai Vasil Chiftlik,** and thence over the mountains into the valley of the **Gerisburnu Chai,** which is then followed and Route 6 is joined not far from **Seyidler** village. The southern track passes either through Aï Vasil Chiftlik or Armudly to **Gyömbe** and thence S. of the Ak Dagh into the Xanthus valley to join Route 3. The journey takes about three days.

ROUTE 8

ELMALY—FINEKA

An account of 1894 states that this road must have been constructed as a broad carriage-road not long before. In that year, however, it was already in great disrepair and fit only for camel transport.

Not far from Elmaly a huge cave is passed, into which a considerable stream disappears. This is said to be the Bashkoz Chai, which according to the local belief runs for several miles underground, cutting through the mountains which surround the Elmaly plateau (see also p. 21).

Farther S. the road for some distance skirts the **Avlan Göl,** a fresh-water lake several miles in circumference, on which thousands of coots are to be seen. A short distance beyond the lake the track enters a gorge in the hills, and at a distance of about 4 hrs. ride from Elmaly reaches a rest-house (? **Avlan Kahve**). The mountains here are well-wooded, and present a striking contrast to those round Elmaly.

The track continues for some hours down the valley to **Bashkoz,** a Turkish village of a few wooden huts at the bottom of the river gorge from which the mountains rise on either side to a height of from 5,000 to 7,000 ft. Their lower slopes are fairly thickly covered with pines, many of great size, and wild goat are to be found in the ravines.

From Bashkoz village the river valley is followed to Fineka, about 25 miles farther on. The road is unfit for wheels, having in places been washed away by the streams which come down from the hills.

ROUTE 9

ELMALY—ADALIA, 63 miles

This route runs through very thinly inhabited country. The distances are estimated from the times noted by the chief authority used.

For some distance before mile 30 the route here detailed may not be that usually taken, the traveller whose account has been followed having apparently missed the regular and better road.

miles	
0	**Elmaly.** Route crosses the plain.
4	**Samun** village to r. **Bayndyr** village opposite on the W. slope of the hills.
6½	**Mürre,** large village with minaret to r. at the foot of the hills.
10½	Track enters the hills and shortly after crosses a col. Steep descent from the summit down the slope of a snow-covered peak to a stream which flows SSE. in a side valley. The track now ascends the stream in a N. direction.
17½	Mill. Track leaves the stream.
20	**Dereköi,** small village to l. Another small village called **Bech** in a small valley to r. Some cultivation. The hills recede about here and the track runs in a general E. direction over dry bare plain past a ruined Turkish tomb. Grey cliffs 250–300 ft. high bound the plateau on either side.
23	Track descends into a valley.
24	Pass a covered-in cistern.
	Track bends gradually round to NE.
26½	**Imejik** village to r.
27	**Susuz** yaila. The winter village lies on one of the hills which bound the valley on the NW. side.
	Track crosses a saddle and descends by a narrow

miles	
	path to a stream which it crosses. Direction now NNE. across the plain.
30	Track improves and recrosses the stream, which runs N. The stream-bed here is about 50 ft. wide.
31	Village to l.
32	**Yazyr** village to r. Some cultivation in the plain and scattered trees.
34½	**Keklije Kahve.** For the rest of the journey see Route 11 from mile 103½.
63	**Adalia.**

ROUTE 10

DENIZLI—ELMALY, 101½ miles

This route appears to be fairly easy after the Kazyk Bel is crossed. The plain of Kara Öyük Bazar, however, in spring is in places an almost impassable morass. The road runs for the most part through upland valleys. Beyond Sügüt (mile 77) it rises over the hills which lie S. of the Sügüt Göl, but no details are available regarding the state of the track over this stage.

miles	
0	**Denizli.** Road runs generally SE. across the cultivated plain; many trees.
2½	Cross a stream; some houses among cereal cultivation and fields of clover.
3¾	Cross the **Baghyrsak Dere.** The stream here runs N. to the plain. It is also apparently called Gökpunar Su.
5	Reach top of slope. From here Denizli bears 305° and the mouth of the pass in front 115°.
6¼	Descend and cross a bridge over the Baghyrsak Dere. Ascend by a toilsome path over a hill.
8½	**Sultan Emir Su** spring, which forms a small lake, whose waters drain to the main stream by a remarkable

miles

düden. Near it is a *kahve*. The track then ascends for some distance and again descends to the stream.

10¾ Recross the stream by a bridge.

12 **Chukur Köi** to r. deep down in the valley. A track branches thence to Yerengume (4 hrs.). Easy hill slopes and cereal cultivation.

12½ Begin the steep ascent of the **Kazyk Bel.**

15½ Summit (alt. 4,370 ft.). Steep rough descent with a westerly trend after some distance.

16 *Kahve* and fountain beside the road. A track from Davas Ovasy comes in here on the r.

20½ **Kyzyl Hissar,** on an outlier of the Boz Dagh, at the mouth of a small valley on the W. side of the plain. The population is partly Yürük. Some vine cultivation.

21 Reach a stream and follow it downwards.

21½ Track branches to l. to Ayash village.

22¼ Track branches to l. to Yataghan village (1½ hrs.).

28½ **Kara Öyük Bazar,** village (alt. 2,650 ft.) built partly on a hill, partly in the plain. From here Kyzyl Hissar bears 309°.

From Kara Öyük Bazar the traveller may follow the E. or W. side of the broad valley to Khorzum (mile 55½ below); the distance is the same in either case. In the former the road passes through Kum Avshar (see Route 11, mile 44½) and Cham Köi, whence a track runs ENE. over rolling hill country crossing many streams to Tefeni (6 hrs.). In the latter it runs to

40½ **Beder Bey** (13½ hrs.). Here the two branches of the Indus, both flowing through wide fertile valleys—one from the N., the other from the S.—unite before running off southward, as the **Gereniz** and lower down the **Dalaman Chai,** to the sea W. of Makri. The track follows the general course of the S. branch and crosses some rounded hills covered with pines and oak scrub to

miles	
52½	**Yusufjy** village (17½ hrs.). Small mosque and ancient ruins.
55½	**Khorzum** (18½ hrs.), a village with orchards and fine walnut trees at the edge of the great plain (Gölhissar Ovasy). Ruins of Cibyra on a ridge in this neighbourhood. After leaving Khorzum the river is forded and the road runs E. over the plain.
62½	**Gölhissar,** to r. on a rocky islet in a lake, connected with the mainland by a causeway (21 hrs.).
69½	**Bayndyr,** on a large stream (23½ hrs.). Some grass-covered hills are crossed to the **Sügüt Göl.**
	This lake is a large gloomy sheet of water, half covered with a thick growth of reeds and cane. It has no outlet, and partially dries up in summer. On the N. shore rises the high range of Rahat Dagh.
77	**Sügüt** village, on the S. side of the lake (26 hrs.).
	From Sügüt it is 8 hrs. to Istanoz (see Route 11, mile 96½) by the S. side of the lake, and 11 hrs. to Keklije Kahve by Illa (see Route 11, mile 103½).
	From Sügüt cross hills to
93	**Choban Issa** (32 hrs.), village near a stream. Track now runs SW.
101½	**Elmaly** (35 hrs.).

ROUTE 11

DENIZLI—ADALIA, 132 miles

This appears to be the most direct road from Denizli to Adalia. It is in places, however, very difficult (see e. g. under miles 17, 83½, 103½, and 112). Alternative tracks over certain stages are noted under miles 44½ and 112.

The heights given below are possibly rather underestimated.

miles	
0	**Denizli.** For the first 28½ miles, see Route 10.
28½	**Kara Öyük Bazar** (9½ hrs.; alt. 2,650 ft.).

miles	
	Direction now SE.
30	**Davas Chiftlik,** in the plain.
31½	**Chorum** village to l.
37½	**Dereköi** to l.
40½	**Yumrutash** village to l.
42½	Here the ridge which bounds the plain on the W. recedes.
	Yazyköi (Yazyr ?) and **Dodurga** villages to E.
44½	**Kum Avshar** village to E. (14½ hrs. from Denizli).
48	An alternative road continues SE., passing along the N. side of the Sügüt Göl, S. of the Rahat Dagh, and thence either by Ali Fakhr-ed-din Yaila to Barsak Yailasy (see under mile 83½ below) or by Manai to Istanoz (mile 96½ below). Present route turns to l. (15½ hrs.) and crosses wooded hills to
65	**Tefeni** (21 hrs.), small Moslem village with a fine spring.
	Cross Tefeni plain.
69¼	Stream. **Öyük,** beside a large mound, whence slight ascent to
74	**Hassan Pasha Köi** (24 hrs.). The road now crosses the lower spurs of the **Kara Kaya Dagh,** and ascends the valley of the Ghöt (? Gend) Chai.
83½	Low col (28 hrs.; alt. 5,200 ft.), beyond which lies **Barsak Yailasy.** After a sharp descent through a narrow rocky ravine, the **Salamut Boghaz,** to **Sirlekler (Sudaklar),** the valley of the **Istanoz Chai** is followed.
96½	**Istanoz** (32 hrs.), a large village on r. bank of the river with small bazar and good gardens. A track branches to Elmaly. It passes Illa village to r. after about 10½ miles and Dilevli village to l. 4½ miles farther on. After another 2½ miles it joins Route 10 at Choban Issa.
	The present road now runs E., and, after fording the Istanoz Chai, crosses the broad valley.

miles

103½ **Keklije Kahve** (34½ hrs.; alt. 3,000 ft.).

A track branches to l. through uninteresting country to Elmaly.

Near the kahve the shortest road, here detailed, enters the hills. It is, however, impracticable for wheeled traffic, which continues down the valley of the Istanoz Chai to Kyzyl Kaya and Boghaz Burun, where Route 12 is joined.

From Keklije Kahve the track runs ESE. ascending a ridge which runs WSW.

104 Summit. Enter a valley lying at a rather higher level than that just left, but equally bare of trees. Direction ENE.

105 Cross a col by a steep ascent. A little beyond it is **Takhtaly Kahve.**

106½ Large cattle-shed near a spring.

107½ Summit of a ridge beyond which the track enters a thickly wooded valley. Direction ESE.

108 **Injirli Kahve.** The track soon enters another valley, narrow at first, then gradually widening. Direction nearly S.; path very rough and difficult. Ashes, wild olives, and oaks among the scrub on the slopes.

113 **Yenije Kahve.** The northern side of the valley here is steep and rather bare, the southern thickly wooded.

Pass the remains of a wall with towers. Valley becomes narrower.

114 Steep descent for a short distance. Traces of an ancient road here and the remains of a dry-stone wall with well-preserved towers built across the valley to r.

The slopes are thinly wooded, with pines and oleanders. Valley widens again.

118 Ruins of a tower to l. at the foot of the Gülik Dagh; remains of buildings and a second tower to r.

Track leaves the valley and runs SE.

miles

119½ Cross a broad water-course to a kahve. The country here is quite flat. Near the kahve are ruins overgrown with bushes. Direction now ESE.

121½ Pass a line of sarcophagi. Track now through thick undergrowth.

123 **Kebes Kahve,** small rest-house.

124 Cemetery near the track, surrounded by pine-trees. A little farther on is a built reservoir. No villages in the neighbourhood.

125 Track emerges from the hills on to the stony, brushwood-covered plain of Adalia.

132 **Adalia.**

ROUTE 12

BULDUR—ADALIA, 75 miles

This is a carriage road and fairly good all the way except for about 1 mile from the summit of the Kyzylkaya Pass (see under mile 42). The surface in 1905 was metalled except from mile 10 to mile 45, and at that time there were stones lying beside the road in places ready to be broken.

The distances as far as mile 15 are apparently those of the kilometre stones on the road. In 1905 the kilometre stones ceased at that point. The times, which work out about 5 miles per hour, are apparently araba times. They are inserted in the text. The distances are those estimated by the authority used. They are probably underestimated.

miles

0 **Buldur.** Road skirts the suburbs of the town along a stream and after ½ mile ascends a valley in the chalk hills.

1½ Water-wheel on r. Road to Krögaz branches off to r., leading over a small stone bridge (23 min.). From Krögaz a track runs SSE. and then SSW.,

miles	
	passing Kestel on the W. side of the Kestel Göl, to Fughla.
3⅛	**Kailuka,** small hamlet of 10 houses (40 min.).
	Road crosses a dry stream by a small wooden bridge; steep banks which must be cut away to make a ford.
3¾	Two small stone bridges with fords on r.
4⅜	**Bunak,** village of 60 houses on l.
5	Summit (1 hr. 10 min.). The road now runs along a plateau with a very gradual and easy descent.
9⅜	Road branches to l. to Chiek.
	Small water-hole on r., 6 ft. deep.
	Village of Karamak reported among hills to r.
10	From this point to mile 45 the road in December 1905 was unmetalled. In places stones were lying alongside the road ready to be broken up for metalling.
12	Small stone bridge: good ford on both sides (2 hrs. 35 min.).
12½	Ascent for over ½ m.: road poor.
13⅝	Down hill for 2 miles, in parts rather steep. A spring rises on l., water coming through a pipe.
15	Stone bridge over ravine with steep banks; no ford, considerable labour required to make one. Thence slight ascent, then steady, and in parts steep, descent.
16	**Tekke,** small hamlet of 30 houses, 1 mile to l.
17	Bottom of the pass (2 hrs. 45 min.). Road very rough: it now leads over a fertile plain to
19½	**Cheltikje,** a village of 60 houses (alt. 2,602 ft.). Fodder plentiful.
20	Road branches to r. to Kyzyl Bujak.
22	**Kyzyl Bujak,** small village, 2 miles to r. (4 hrs. 50 min.).
23	**Kia-mally** (? Kyakhmaly), village of 20 houses, 1 mile to l. (5 hrs.).

miles

23½ Cross shallow stream running S. by good ford (5 hrs. 5 min.).

The stone bridge in 1905 was narrow and out of repair.

24 Cross small stream by small wooden bridge. A ford could be easily made (5 hrs. 10 min.).

24½ Road crosses a small ridge (5 hrs. 20 min.) and descends rather sharply to a valley. Cham Hally river runs down the valley on l.

25½ Cross small stream by wooden bridge. A ford could be easily made (5½ hrs.).

26¾ Cross stream by good ford, 12 in. deep. Very bad stone bridge with two pillars (5 hrs. 53 min.).

28½ **Bujak** (6 hrs. 10 min.), large village of at least 500 houses. Wooden minaret. Good water. The village is built partly on the W. slope of the hills, partly on the plain. A stream runs through it. Track now crosses the fertile plain.

30½ A more direct road which runs across the plain, leaving Bujak 2 miles to l., comes in here on r. (6½ hrs.). See Route 13, mile 10.

33½ **Margarvyk,** small hamlet on r. (7 hrs.).

Usköi (? Susuz Köi, alt. 2,479 ft.), small hamlet ½ mile to l.

38 Water-hole on l. (7¾ hrs.).

41½ **Yusuf Chaush** (8¼ hrs.), small kahve (Boghaz Burun on the map).

Road continues down a well-cultivated valley. Vines, quinces and birches are now seen.

42 Big hole in the middle of the road.

45 From this point the road in 1905 was metalled right to Adalia. Apparently about here the road bifurcates. One branch keeps to the r. and runs down the Chibuk Boghaz. It is used by pack-animals as the gradients are easier than the route detailed, but it is very hot in summer. It follows a narrow rocky

miles

ravine, in places only a few yards wide, is very winding, and is quite unfit for wheeled traffic. The present route bends SE.

46 **Baidamajy** (? Padem Aghach), small village of 30 houses, 1 mile to r. (9 hrs. 10 min.).

47 Cross dry stream by a good ford (9 hrs. 20 min.).

48 **Afuz** (? Hafiz) **Pasha,** small hamlet of 15 houses (9½ hrs.).

For the next mile there is a steady and rather steep ascent to the summit of the Kyzylkaya Pass, the surface of the road being excellent. From the summit (alt. 1,800 ft.) there is a difficult stage. The road descends between overhanging mountains by a winding road very steeply for 800 yds. (800 ft. according to another authority), afterwards less so, but steep all the way for the first mile. Road runs down a gorge, being very good all the way except in patches. There are 8 small wooden bridges during the descent, all of which are easily repairable. The pass is completely commanded by the hills on each side.

57½ Bottom of the pass (12 hrs.). The road emerges on to the **Chykyn Ova,** a plain covered with brushwood. The plain consists of an upper terrace from which the mountains rise abruptly and a lower terrace which ends in the cliffs of Adalia. A direct track from the bottom of the pass crosses the plain to Adalia. The usual caravan-road (here described) keeps to r. at the foot of the hill.

58¾ A ruined house with a good spring on l. (12¼ hrs.). Road undulates round two hills to

59¾ **Kyrk Göz** (Forty Arches) (12 hrs. 25 min.), a fine causeway about 600 yds. long. The first part, 9 ft. wide, passes over water, running E., and the second, 6 ft. wide, over swampy ground. Not far off, the water disappears, to come to the surface again as the Düden

miles

Su, about 1½ hrs. from Adalia. The whole length is very roughly paved with large stones. There is a kerb-stone, 1 ft. high, nearly all the way along it, but very careful driving is needed over the narrow part. A kahve stands on a rock at the centre of the causeway. Road continues across an open plain covered with brushwood.

64¼ **Kyzyl Burun,** small kahve (13 hrs. 9 min.).

66 **Kara Baiil** (? Kara Ba'yr), a small hamlet on l. with some old ruins (13 hrs. 28 min.).

67¼ **Atalan,** small kahve (13 hrs. 41 min.).

68½ Road from Istanoz comes in on r. (13 hrs. 56 min.). Road descends by winding fairly easy slope to lower plain, passing

69½ **Charvak,** a small kahve with a well opposite (14 hrs. 21 min.).

70¼ Road reaches lower plain (14 hrs. 29 min.).

72 Well on l. (14 hrs. 46 min.).

74 Suburbs of Adalia (15 hrs. 4 min.). Road crosses a small stone bridge over shallow stream with good ford on r.

Road crosses a small aqueduct (15 hrs. 6 min.).

75 **Adalia** (15 hrs. 16 min.).

ROUTE 13

ISBARTA—ADALIA, 84½ miles

This route partly follows the line of one of the ancient Roman roads, but is now a difficult pack-track.

The more direct (and apparently the easier) route from Isbarta to Adalia is that which goes by the Mamak Ova (see under mile 10), but details are wanting regarding it from Aghlasun to Bujak. The route detailed here is the more interesting, but is said to be in parts one of the worst in this

region. At Bujak (mile 60½) the carriage-road is joined and followed to Adalia.

The distances given in the itinerary are partly taken from one of the original authorities consulted, partly calculated from the times noted by travellers for separate stages.

miles	
0	**Isbarta.** Track runs WSW.
1¼	**Dere Mahallesi** village.
	Walnuts and fruit-trees. Direction changes to SW.
1½	Track crosses, near a mill (? Bash Deirmen), the stream which runs past Isbarta, and ascends the narrow stream-valley. Many windings. General direction nearly S. White cliffs on either side. The stream has to be forded many times.
3	Track now runs along the r.-hand slope, crosses a projecting cliff and descends again to the bank of the stream. The valley broadens; some pasture and ruins of an ancient bridge near here.
4	Track emerges from the valley, runs W. for a short distance and for the last time crosses the stream. A difficult zigzag ascent follows over limestone up the Aghlasun Dagh. Some pasture near a small stream.
5	Summit (alt. 5,640 ft.). Difficult descent.
5¾	Small kahve.
	Edge of the S. slope of the Aghlasun Dagh. Broad green valley with thick clumps of trees in front. Descent by a path at times barely a foot wide winding between boulders and past a spring. The overflow of the spring runs to a stream which flows SSE. past Aghlasun village.
	The track now follows the stream, passing the ruins of the ancient Sagalassus.
10	**Aghlasun,** small village among rich foliage.
	[From Aghlasun there are said to be two routes to Adalia. The direct (and apparently easier) road runs over the small plain of Mamak Ova, and crossing

miles

two low rocky ridges enters the Bujak plain at **Injir Bazar Khan,** now in ruins. Thence it crosses the plain, leaving **Bujak** to r. and crossing the route detailed as the carriage-road from Buldur to Adalia rejoins it 2 miles beyond Bujak. See Route 12, mile 30½.

The other track lies more to the E. It is given by one authority as follows :

h.	m.	
		Aghlasun ; cross a low ridge.
1	0	N. end of one of the two plains of Aghlasun. Track crosses the plain.
1	45	Ascend WSW. to summit.
1	55	Descend a pass SSE.
3	25	**Dere Köi** village. Direction now SE. through the plain.
4	10	**Kyakhmaly** village to l.
5	10	**Sazak** village. Track now ascends to a pass W. of the citadel of Cremna and descends to
6	55	**Girme** village.

It is uncertain how far this route coincides with that detailed below. The authority used for the following itinerary apparently left the regular track after some miles, but his account has been given for the sake of the description of the country passed through.]

From Aghlasun the route here taken follows a narrow winding path through orchards of walnut, cherry, plum, and pear. After emerging from the gardens the road runs SSE. across a broad green valley, bounded on the r. by rounded hills, on the l. by the slopes of the Aghlasun Dagh. Some oaks along the track with vines growing on them. Direction changes gradually to nearly due E. On the r. is the Aghlasun Chai with several mills along its course.

miles

11½ Cross the stream by a wooden bridge a little below the first mill. Large walnut trees near. Track runs S. through pasture-land crossing the stream a second time by a high arched bridge near two mills. Direction then changes to ESE.

13½ Village on the N. slope. Short zigzag ascent up the S. slope, after which the track enters a valley running SE. The heights on either side are thinly wooded with pines, junipers, and scrub. Deep gorge on the r. for some distance. Valley narrows.

16 Stone hut enclosing a watering-place. The valley slopes down between slaty cliffs. High pines farther on. Track continues towards a ridge thickly wooded with pines, among which rise rocky peaks. Direction bends gradually to S.

17½ Foot of the ridge. Track enters a valley running from SSW. to NNE. through which a stream flows probably to the Ak Su. Direction now nearly S.

18 **Assar Köi,** poor village on a crescent-shaped piece of level ground on the E. side of the valley. Behind it rise high ridges broken by a few small valleys and ravines. The country now appears even more thinly populated than that already passed through. Ascent over a hill.

19½ Track enters a narrow valley between steep cliffs lying in a crescent from SE. to E. Thick oak scrub on the slopes and pines on the summit. Farther on the valley narrows and the pines cover the whole slope. Track winds down through the trees.

22½ Enter another valley running SE. and ascend its S. slope, then cross a patch of meadow-land where the beaten track disappears. To NE. a deep ravine with a stream, and high cliffs on its W. side.

Beyond this point the route taken by the authority here followed is probably not the usual one. It runs through thick scrub and then nearly E. through

miles

woods to a summit beyond which is a difficult descent into a valley. The valley is then crossed and the track ascends the opposite slope through thick scrub. After a long difficult ascent a flat-topped ridge is crossed, beyond which the route continues across pasture-land and through scrub.

30 **Girme** village, on a small plateau. View over a green valley surrounded by wooded heights.

The ruins of the ancient walled city of Cremna lie 40 min. distant on a plateau protected on three sides by almost perpendicular cliffs.

Track runs SW. from Girme village along the mountain slope passing a cemetery lying among oaks and elms, beyond which it ascends a very bad path, sometimes like a stair, which bends gradually W.

31 Cross a high saddle. Spring, the overflow of which runs to the Ak Su to the E. The Ak Su valley now disappears from view. Track continues through thick pine-forest towards a ridge at first WSW. and then gradually more to the S.

34 Descent into a valley. Some cultivation here. Soon afterwards a small rise is crossed and the green valley in which Bujak lies opens out in front.

38 **Bujak.** For the rest of the journey to Adalia see Route 12 from mile 28½.

84½ **Adalia.**

ROUTE 14

EGERDIR—ADALIA, 75 miles (26¼ hrs.)

This is a fairly easy route till the mountains are entered at mile 21½. Beyond that point it is frequently rough and difficult as far as Torumlar (mile 55).

The *düdens* of the Boghaz Su are among the most interesting in Asia Minor (see p. 30).

The distances given below are calculated from the times given by the main authorities and from about mile 17½ do not agree with Kiepert's map.

An alternative track over the first stage goes by Tepeli village (see under mile 10½).

miles	
0	Leaving **Egerdir** follow the border of the lake in SE. direction.
3	Bridge over **Boghaz Su** where the river runs S. from the lake following the W. side of the valley at the foot of the mountains. Thence continue SE. crossing the valley diagonally through fine vineyards.
5½	**Punar Bazar** (¾ hour from the Boghaz Su bridge in the reverse direction); the village gets its name from a large spring that rises in it. Thence head W. across the valley.
7	Reach the Boghaz Su and cross by a bridge at extreme western edge of valley. Immediately below the bridge there is a small *düden*. Here the river bends E. till its bed follows nearly the centre of the valley.
	Direction now S.
9	**Jire,** village at mouth of a lateral *boghaz* which comes from W.
9¾	The Boghaz Su again approaches mountains; large *düden* (10 min. S. of Jire).
10½	Very large *düden,* just opposite village of Tepeli (20 min. S. of Jire).
11¼	The Boghaz Su turns and crosses to the E. side of the valley, where it forms three or four *düdens.*
13	River again reaches the W. side of the valley. Within the next 2½ miles the river forms five more *düdens,* in the last of which it finally disappears (1 hr. 49 min. from Jire). For six months (during winter and spring) the Boghaz Su flows into the Koghade Göl, the water being then abundant enough to force itself over the slightly rising ground south

miles

of this point. This takes place on the eastern side of the valley as the western side is much too high.

17½ Cross a stream from a lateral gorge to the threshing-floors of village of **Göidere** (½ hr. from the last *düden*). The stream, the Göidere Chai, flows SE. to Koghade Göl.

Thence head S. through a wooded country which descends very slightly.

19½ Reach bed of a dry *chai* which carries off drain water during wet months in SSW. direction and probably flows to the Ak Su.

21½ Begin to ascend mountains (1 hr. from the Göidere Chai).

22¼ **Koghade Göl** lies below on the l. (¼ hr. farther).

23½ Summit (¼ hr. farther). Thence rough and tortuous descent S. to

25½ **Gök Punar** (1 hr. from summit), a large spring, one of the outlets of the Koghade Göl.

Continue in a S. direction, ascending for the most part over wild and difficult country.

27½ Summit (1 hr. from Gök Punar); far below to r. village of **Syghyrlyk.**

Difficult descent passing near **Khoja Assar,** a ruined monastery, and **Malek Kalesi.**

The road follows a ravine crossing the **Küchük Chai,** and then the **Khoja Su** by a stone bridge, the **Eyiler Köprü.**

32 **Chandyr** in the **Pambuk Ova** (10½ hrs. from Egerdir). In this district there are many trees of wild olive, fig, pomegranate, and frankincense; the people are ignorant, wretched, and shiftless. There are houses scattered about the region, but they do not form villages properly speaking. During the summer the people abandon their houses and dwell in tents, or else in the open air under trees.

The track now crosses into the **Kyrk Gechit Pass,** a narrow winding stony ravine between high hills.

miles	
	The stream has to be forded many times. In winter it is a roaring torrent.
55	**Torumlar** or **Haji Omar** (9 hrs. from Chandyr), small village on the large, brushwood-covered plain of Chykyn Ova.
58	Ford across the **Ak Su** (¾ hr. from Torumlar).
65½	Track leaves the Ak Su valley (3 hrs. from Torumlar) by a ravine in which are the remains of an old paved road and an aqueduct that carried water to Perge.
	Track continues over level ground crossing the **Düden Su** by a stone bridge.
75	**Adalia** (15¾ hrs. from Chandyr).

ROUTE 15

KONIA—ADALIA

Via FASSILER, BEYSHEHIR, AND KARA BAULO, 168 miles

This is a more direct road to Adalia than that detailed in Route 16. Part of the country through which it passes to Beyshehir is, however, very broken, and the path is so indistinct that a guide is needed. From the point (mile 64) at which the present route leaves that by the Kessik Bel pass there is probably little to choose between the two roads as regards difficulty, but the track here detailed is said to pass through lake and mountain scenery of great beauty, while there is abundance of game, large and small, in the valleys. This track is the usual one for horses and is quite unfit for wheeled traffic. In winter it is often very bad for horses. The snow lies deep (4 ft. or so) in some of the passes until late in the spring and two-thirds of the yailas are without inhabitants except in the summer months.

The distances given below are partly taken (as far as

Beyshehir, mile 48) from those given by one of the authorities used, partly calculated from the times taken over various stages.

miles	
0	**Konia.** Road passes through **Meram,** the garden-suburb of Konia, and runs SW. up the plain.
8	Road enters the hills (2 hrs.).
12	**Chayrbagh,** straggling village with numerous gardens (3 hrs.).
	Track now runs over bare hills.
22	**Bulumia** (alt. 4,500 ft.), well-built village with small *oda* near a stream ; small bazar (5½ hrs.).
	Track now ascends the stream, passing a fountain and mill. The valley soon narrows. On the cliff to l. are rock-cut tombs.
23½	A ruined Seljuk khan is seen to r. (6½ hrs.). Sarcophagi in this neighbourhood.
27½	Road leaves the stream (8 hrs.) and crosses the ridge to l., descending to r. of
31½	**Inlije,** large village with mosque ¾ mile to l. (9 hrs.). General direction now WSW. The road is difficult to find and winds over very broken country.
39	**Fassiler,** rich village (12 hrs.). Remarkable 'Hittite' monument 5 min. to W. in a *dere.*
	Road passes through the village of **Chichikler** (¾ hr. from Fassiler), where there is a fountain and small *oda*
48	**Beyshehir** (15 hrs.). For some miles the road followed is that detailed in Route 16.
64	About here the present route leaves the track which goes by the Kessik Bel pass and strikes across the marshy valley.
66½	**Kashakly,** poor village standing just above the marsh and unhealthy (19½ hrs.). Road runs S. from the village.
67½	The track turns to r. and runs W. up a valley from the Anamas Dagh. A guide is required here. Good path.

miles	
78	Summit (about 2¼ hrs., alt. about 6,000 ft.).
79	**Kesme Yaila** (2½ hrs., alt. 4,500 ft.).
	Ruin of Roman construction to r. (2½ hrs.).
82½	**Kesme,** small village with poor mosque (27 hrs.). A guide is necessary from here.
86½	Track passes through a conspicuous gap in the ridge to W. of Kesme (29 hrs.).
88	Cross the magnificent canyon of the **Eurymedon** (30 hrs.) by a very steep descent of nearly 2,000 ft. and an equally steep ascent of 1,200 ft. to **Kasymlar,** a wretched village. Beyond this village the ascent is more gradual. The country is well wooded with pines.
98	**Tota Bel Yaila** (about 34 hrs., alt. 5,000 ft.), good halting-place with abundant water and pasture.
105½	**Kara Baulo Yaila** (37 hrs.); mosque, and fine spring.
	Ruins of Adada ½ hr. distant.
	They lie on the W. edge of the Zengi Ova among barren mountains.
113	**Baulo** (40 hrs.), rich village on the mountain-side among orchards. Residence of a Mudir. The track apparently runs down the Baulo Dere. In the lower part of the valley is **Suyun Gözu,** the source of the **Khoja Su.** The river rushes through a narrow gorge, artificially widened, and is here 30 ft. deep, and full of fish.
120	**Yazyly Kaya,** rocks with three inscriptions.
123	Track crosses the Khoja Su by the Eyiler Köprü. For the rest of the journey to Adalia see Route 14 from mile 27½.
168	**Adalia** (59¼ hrs.).

ROUTE 16

KONIA—ADALIA

Via KYZYL ÖREN, BEYSHEHIR, AND THE KESSIK BEL PASS, 208 miles

In 1907 this road was probably completed as a chaussée as far as Kyzyl Ören (mile 32). Beyond that point the road was apparently metalled in places and the earthwork laid down as far as Beyshehir (mile 68). From Beyshehir it was unmetalled but passable for wheels to Dere Köi (mile 97), or (in summer) to the S. end of the Kampos plain (mile 110). Beyond that point it degenerated into a camel-track, and for over six miles was extremely bad. From where the track leaves the Kampos plain for a good many miles there are steep ascents and descents (see e.g. under mile 125 and mile 135½). At mile 142 a chaussée (unfinished) began, ending at mile 161, and beginning again at mile 176. It was apparently unfit or barely passable for wheels till mile 181, from which point the country is easy. From mile 199 to Adalia it was in good repair.

The heights and distances given below are only to be regarded as approximately correct. The distances are those given by the main authority. Another traveller gives the distance to the junction with the track to Akshehir as 12¾ miles, to Kyzyl Oren 22½ miles, and to Yonuzlar 32¼ miles. All the distances given below from Bayat should perhaps be reduced by ½ mile, there being apparently a mistake in the addition of the intermediate distance between that place and Chandyr.

miles	
0	**Konia** (alt. 3,341 ft., Kiepert). Cross line north of railway station by new chaussée; metalling unfinished. Direction W. over plain.
2	**Khoja.** Alternative chaussée from Meram and Konia comes in; ascent begins; gradient and surface good; road 20 ft. wide.

miles

8 **Ak Yokush** (alt. 3,940 ft.), small khan for shelter only (1 hr. 46 min. from the W. limit of Konia plain); Sille visible to N. A track branches S. to Meram. Bare easy hills; little cultivation. Descent begins.

16 **Alty Kapu.** Stone bridge (one arch) over Bashara Su, which waters Meram and Konia. Stream 30 ft. wide, 1 or 2 ft. deep in summer; liable to flood in winter; good water and camping ground; approaches easy; some trees and gardens. Village ½ mile up stream. At this point also there appears to be a well-preserved Seljuk khan at which a horse-track diverges to Akshehir. Ascent begins.

24 Ruined khan on summit of long easy hill (alt. 4,700 ft.). Here the chaussée ended in 1907, but work was in progress and completion to Kyzyl Ören at least was certain by the end of the year.

32 **Kyzyl Ören.** When chaussée is completed this village will be more than a mile south of it. It lies under a flat-topped mountain with pines on the lower slopes; 150 Turkish houses; wheat and barley plentiful. (The time taken by one authority, travelling in the opposite direction, from here to the last-mentioned khan was 1 hr. 5 min., and to Konia 6 hrs. 20 min.)

When finished the road will cross a well-watered and fertile plain for 4 miles, passing a Seljuk khan.

35½ Enter valley of **Chukura Su,** narrow in places, sides steep and rocky. Road 15 ft. wide, metalled, a few bad places; no villages.

47 Chaussée, in 1907 earthwork only, 24 ft. wide passes N. side of valley. The present track leads through **Yonuzlar** village on S. side. (This village is 3 hrs. 18 min. from Kyzyl Ören in the reverse direction.) 200 Turkish houses; trees and gardens (alt. 4,450 ft.); supplies fairly plentiful. Valley 1 mile wide, easy hills. Anamas Dagh appears to block valley to SW.

miles

One mile from Yonuzlar road crosses low ridge to SW. (Kiepert wrong), crossing Chukura stream above Chukura village and enters valley of the Millijöy stream above

51 **Bayat.** Small triangular plain. Millijöy visible at apex to SE. From Bayat a track leads S. over the hill to Durghan.

Ford Chukura. From here there is a road (for wheels) to Ilghin, 10 hrs.

Chaussée unfinished; earthwork 24 ft. wide.

54 **Shandur** (? Chandyr). Here the Millijöy flows into the Chukura stream. The two together form a river some 20 to 30 ft. wide, fordable in places in summer, impassable in winter except at bridges. Valley fertile; low easy hills.

57 **Saryköi.** 200 houses. Stream now called **Sary Su.**

60 **Köch.** Earthwork of chaussée crosses low spur to S., coming into valley lower down; no road-bridges yet made (1907).

65 **Avshar.** Road crosses Sary Su from E. to W. by stone bridge of 3 arches and runs 1 mile through gardens and orchards. Then S. over wet plain past **Icherishehir,** a suburb of Beyshehir, which lies on a mound by the lake. Road crosses stone bridge about 40 yds. long to

68 **Beyshehir** (alt. 3,741 ft.), unhealthy town on the horns of a bay of the Beyshehir Lake. The lake is navigable but the boats are few and clumsy. The water is good to drink. River connecting Beyshehir lake with the Soghla Göl has been used to irrigate Konia plain. It is about 35 yds. wide, 3 ft. deep in summer, and swift.

Roads run from Beyshehir (1) S. to Seidishehir (metalled), (2) N. to Kirili (unmetalled), (3) W. to Iskelaz (unmetalled). Road now follows the S. shore of the lake.

69 **Iskander,** camping-grounds. Two tracks from

miles

near here to Iskelaz (mile 79 below), one along shore, one farther inland. Both are passable by wheels, but the shore road is bad in winter. The present route apparently skirts the lake.

71 **Bademli** village visible S. of road at foot of hills. (This village and the next have been transposed on Kiepert's map.)

73 **Karadiken,** 100 houses, Turkish ; some cultivation. Road leaves the lake and crosses a small spur. An alternative road branches to l. about here.

76 Cross the stream from Iskelaz by a bad wooden bridge ; stream 1 ft. deep, 15 ft. wide ; floods in winter. Road follows stream more or less to

79 **Iskelaz** (alt. 3,950 ft.) ; 300 Turkish houses. The snow is said to lie here for 6 months in the year. The road is a rough track, used for wheels in summer.

84 Track winds round rocky spur (generally W.) and arrives in a broad swampy valley, across which stands Kashakly. Meirangoly marked by Kiepert at this point is 1 hr. farther S., and Ada Köi marked E. of the valley is W.

86½ Road crosses the valley—very swampy in winter—and ascends on W. bank.

89½ **Chetme,** small hill-village. Thence over a low wooded ridge, the watershed between Beyshehir and the sea, and down a narrow valley.

97 **Dere Köi** (alt. 4,150 ft.), 150 Turkish houses ; mountains on each side about 6,000 ft. Roads lead (1) S. to Akseki (impassable for wheels), (2) W. to Kampos plain, which is passable in summer by wheels and in winter is a lake. Beyond the plain a difficult track leads over the mountains (see Route 15). Kampos plain drains southward by an underground channel. Its sides are steep and wooded with pine, cedar and oak. The plain is cultivated if it dries early enough to sow.

miles	
110	S. end of Kampos plain; water in shallow wells. Slight ascent.
111½	Shelter khan for winter, with a spring. Here a road diverges S. to Ibrade (6 hrs.). Carts have been known to make this journey. Present route runs SW.; road fit for pack transport only.
112½	**Loyka,** a conspicuous steep mountain E. of the track. **Metik Dagh** on the W. (Kiepert's names for mountains are here unreliable), valley much shut in, sides steep and wooded; summits bare, about 2,000 ft. above track. The path is used by camels but is extremely bad. It would require much work and the use of explosives for over six miles.
121½	**Sobujaor Ilzunly,** rocky wooded plateau; a little cultivation (alt. 3,650 ft.); water from wells and (till the month of July) from a stream. Track now easy.
125	Edge of plateau. Road descends westwards by a bad track.
128	**Enif Ova** (alt. 3,450 ft.), an irregularly oval plain about 8 miles long by 3 across, cultivated in years when the snow melts early; some grass. It is drained by underground channels W. and S. **Bashlar,** a miserable Yürük village of a few huts. The population of the plains is mostly nomadic, Yürüks and Kyzylbash. Track across plain SW. towards Zimri Dagh (Kiepert Haklyk), then S. Many wells and springs at the foot of the steep mountains; abundant firewood; no supplies. Over the north shoulder of Zimri a track, passable for mountain camels, goes to Karabujak.
133	Path leaves the plain at the SW. corner, about 2½ miles S. of the ruined khan marked by Kiepert, close by a Yürük hamlet.

miles

Path (difficult to find) climbs steeply for 1,000 ft. to the summit of the **Kessik Bel** pass (alt. 4,450 ft.), then along level through pine woods to

135½ **Demir Kapu** (Iron Gate); sea now visible. An old Roman road, paved with slippery cobbles, descends sharply for 1,500 ft. between rock walls.

138½ **Kessik Bel Dibi,** small camping ground; spring below it (alt. 2,900 ft.).

140½ Spring in a fir wood 5 minutes off track down hill; good camp for small parties.

142 A section of the Adalia road was once built to this point. It is 18 ft. broad, with stone road-bridges, and culverts. The gradient is good, but the metalling has never been finished, and in 1907 no repairs had been done for 12 years. Vegetation was already breaking the road and spoiling its drainage.

152 **Karaja Aghach,** a camp off the road up-hill; grass and firewood (alt. 2,300 ft.). Road has a general direction SW.

161 **Karghyl Khan,** a large Seljuk khan; good shelter and water (alt. 1,600 ft.). Here the chaussée from the foot of the Kessik Bel ends. The road is now a rough path only.

163 Path forks—the southern branch goes to Kashyler (6 hrs.), Ilije (8 hrs.), Bazarjyk (9 hrs.). The western branch (here followed) goes to Adalia,

176 **Karamandalar.** The Adalia chaussée (earthwork only) begins again (alt. 300 ft.).

179 **Charkysh,** a large farm with good supplies ½ mile N. of road.

181 **Köprü Su** (alt. 200 ft.). Roman bridge of stone over river 90 yds. wide, unfordable and swift, said to be navigable for boats from the sea to the bridge. The bridge is 10 ft. wide, with a low parapet. High ground on Adalia side.

After Köprü Su the road is better and used by

miles	
	wheels. The country looks fertile; plain partly cultivated; many villages visible; low sandhills towards the sea. Road crosses several streams by old stone bridges.
197	**Ak Su** river, unfordable, about 50 yds. wide; wooden trestle bridge and wooden roadway. Work on the road had been begun in 1907.
199	Road runs between low hills and is in good repair from here to Adalia.
201	Road rises slightly to a long open heath.
205	Descent to a marsh.
208	Pass marsh and cross Katarraktes river by fine stone bridge. Then follow various streams. Road runs through gardens to **Adalia.**

ROUTE 17

ADALIA—SELEFKE, 256 miles

The greater part of this route is merely a track. It does not appear to be passable for wheels, except possibly over short stages, and is not in regular use. The main authorities used for the itinerary are archaeological reports, and the route detailed may in places not be the track most commonly followed. The distances are calculated from the times noted by the various travellers whose reports have been consulted, and can only be regarded as approximate.

miles	
0	**Adalia.** For the first 27 miles see Route 16 in the reverse order.
27	Roman bridge over the **Köprü Su.** The road to Konia branches to l. Present road runs E. over the plain, crossing many streams.
33½	Road enters the hills. Ruins on both sides. Two well-preserved square towers of white marble on l. The place appears to be called **Göverjinlik.**

miles

Track now crosses narrow hills, and valleys for the most part marshy and overgrown with thick vegetation.

39 **Ilijera,** village of 40 houses; copious spring beneath huge plane-trees.

Track still through hilly country.

44 **Sarylar** village; good quarters in the house of the Bey. The village contains about 60 well-built stone houses lying in a small valley at a short distance from the Menavgat Chai. Fine mosque and well-kept streets.

45½ Large khan, and ferry across the **Menavgat Chai** (the anc. Melas). The breadth of the stream is at most 80–90 ft. and the depth 6–8 ft. The water is cold and refreshing. **Menavgat** (also called **Bazarjyk**), dilapidated village on the l. bank. The river is navigable for small craft up to this point.

At about 1½–2 miles S. is a large castle on the r. bank.

Track now runs across a well-cultivated plain, with few trees. The villages of **Ismail Khoja, Arablar, Arghan,** and **Chaush Köi** are passed.

51½ Ground now more broken.

56½ Track crosses a stream and runs over high open plain.

58½ Track crosses the **Karpuz Su**; broad bed probably unfordable in spring. Track now over hilly ground covered with brushwood.

63 **Chengir,** small village to l. (7 hrs. from Bazarjyk).

65 Ford near the mouth of the **Alara Su.** In time of flood the ford is dangerous, and it is better to cross by the bridge at **Allar** (**Alara**?), 3 miles inland.

66½ **Karaburun** on the coast; extensive ruins.

Road now good, along the coast passing several ancient sites. The second half of the journey from Karaburun to Alaya is apparently difficult.

miles	
91	**Alaya** (Coracesium, 8½ hrs. from Karaburun). Road now enters a rich plain thickly dotted with the ruins of deserted Christian villages.
95	Road crosses the **Dim Chai,** a fine stream issuing from a deep glen. The ruins of **Kestel** are passed on the l. and the great rock mass of the Kestel Dagh.
102	Road passes between a round-topped hill with ruins and a hill about 1,000 ft. high on which are extensive ruins, probably of Syedra. Some distance farther on the **Sidre Chai** is crossed by a ford. Timber is floated down this stream for export.
104	Road turns inland.
109	**Damalan,** at the mouth of a deep gorge.
114	**Hach Bel** (Cross Pass), the boundary between the vilayets of Konia and Adana. Road descends to the plain.
126	**Selinti,** locally called Bazarjy Kalesi. The Emperor Trajan is believed to have died here; hence the ancient name Selinus Traianopolis. The road runs over softly undulating plain dotted with villages.
129	Road crosses the **Injarkara Su** and ascends a stream valley with picturesque heights to r. between it and the sea. Some pine forest. **Bujak** (to l.) is passed and **Gijik** (to r.).
139	Precipitous ascent out of the valley to the village of **Güne.**
139½	Summit. View of the peaks of Lycia and Cyprus. Ruins of Antiocheia ad Cragum near. Road follows the summit of the ridge, which rises steeply from the sea.
147	Descent through **Jejek** village to **Sazak.** Road now bad and rocky, under immense cliffs.
152	**Chaladran** plain shut in by high mountains. A few Greek houses on the bay and some ruined buildings. Route now continues along the coast over steep

miles	
	fore-heights and in long curves along the slopes; going difficult over gravel.
158	Path turns inland through a beautiful wooded valley.
163	Road reaches the coast again. Ruins, probably those of Platanistus, near here.
	Ascent through forest, and then along the high mountain slope past a fine spring, **Kyzlarpunar.** Ruined castle to r.
169	View of the plain of Anamur. Descent by a good road through the village of **Ortaköi** and over a broad water-course. Direction then NE. over a strong stream (? the Sultan Su) from NNW.
175½	Ascent to **Chorak,** the chief town of the Anamur Kaza (5 hrs. from Platanistus). The place is built on mountain spurs which divide the plain of Anamur.
	Road now runs over the coast plain and crosses the broad stream of the **Derenderes Chai,** which in places turns the plain into a marsh.
178½	**Mamurjy Kale** or **Anamur Kalesi** on a wide sandy bay. **Bostan** village 1 hr. to N.
	Road crosses a high stony promontory into a narrow valley and then crosses a flat tongue of land.
184	High stone bridge over the deep **Sokhta Chai** or **Siji Chai.**
187	**Sokhta Kalesi,** castle on the slope of an isolated hill to N.; **Bidiköi** village ½ hr. SW. of it at the foot of the mountain.
	Direction now ENE. through wooded hilly country and across the neck of the promontory **Kyzyl Liman Burnu** to the coast. Then follows an ascent across a small valley with mediaeval ruins.
194½	**Aksas** village (alt. 223 ft.).
	The road descends the slope from Aksas, crosses the plain and follows a level valley (stream dry in November).

miles	
198½	Ascent from the valley over high rocks which fall precipitously to the sea, followed by a descent to the narrow valley of the
206½	**Sowuk Su.** Road ascends and follows high mountain path above the sea.
208	**Kilindria.** (See p. 147.)
	Road runs along the coast, then follows a level valley and crosses a sharp promontory off which lies a high rocky island.
214½	Bay on r., from which the track ascends by a narrow winding path.
218½	Road crosses the **Dobadyr Su** (anc. Melanus) to **Babadul** on the E. side of the valley.
222½	Ascent over a mountain spur. General direction now SE. over rocky heights.
229	Bay of **Porto Cavaliere.**
	Ascent over the rocky ridge of Capo Cavaliere (anc. Zephyrium).
233	Difficult descent to a bay lying between Capo Cavaliere and a flat tongue of land to NE.
	Road now ascends NE. through a valley with scattered huts on either side.
238	**Ovajyk** (alt. 459 ft.), winter village. Direction now SE.
240½	Track now runs NE., descending steeply.
243	Foot of descent; many ancient ruins on either side.
249½	**Ak Liman** or **Tash Scala,** the present port of Selefke; stone pier and a few warehouses. The roadstead is open and only partially protected on the E. by the long sandy spit called **Kum Kapu.**
	Road now good over low hills, passing through **Meremli** village.
256	**Selefke.**

ROUTE 18

ADALIA—AKSEKI

The journey is said to occupy 20 hrs., but no details are available as to the exact route taken. It probably follows the Konia road (Route 16) for a considerable part of the total distance.

ROUTE 19

ALAYA—AKSEKI

This journey is said to occupy 16 hrs. At **Firsün,** rather more than half-way to Ak Seki, a track comes in on the l. from Sarylar.

ROUTE 20

AKSEKI—BEYSHEHIR

This road is not passable for wheels. It runs N. to **Dere Köi,** where it joins the road detailed (in the reverse direction) as Route 16 (mile 97).

ROUTE 21

SIRISTAT—BEYSHEHIR, 76 miles

This route is passable for wheels throughout. Between Siristat and Acherli Bazar it runs through rolling country. Beyond Acherli Bazar to Serai the ground is fairly flat.

From Serai a chaussée runs up the E. side of the Soghla Göl and thence up the valley of the Beyshehir Chai to Beyshehir. No details can be given regarding it, but it is of recent con-

struction and probably good, being of considerable importance in connexion with the scheme for the irrigation of the Konia plain.

For the first part of the route the following distances, measured by trocheameter, are available.

miles	
0	**Siristat.**
3¼	**Akche Punar.**
6	Fountain. **Mehre** village about ¼ mile to W.
7¼	**Gündüghün.**
8¾	**Acherli Bazar.**
10½	**Eldivan.**
13	Chiftlik. Road goes by **Yaly Hüyük.**
18	**Serai.**

From Serai to **Beyshehir,** by the chaussée, the distance is 58 miles, according to an official sketch-map.

ROUTE 22

SIRISTAT—ALAYA, 71 miles (34 hrs. 50 min.)

There are three routes from Siristat to Alaya :

1. Via the district of Pirlevgunda (SE. of Siristat), much used by traffic between Konia and Alaya.

2. By the Pass of Susanbeli. This route involves 4 days in the open. (The evidence available does not indicate the position of the pass.)

3. By Dedem Köi, the Yelli Bel Pass and Beden village. This is the shortest, but most difficult. It is that detailed below.

The country through which the route passes is mountainous and was very sparsely inhabited in 1862. The gradients are often steep. The chief descents are between the Yelli Bel Pass (mile 30) and Beden village (mile 36), and from Durbanas (mile 58) to the plain of Alaya (mile 68).

The distances given in the itinerary are calculated from the times given by the original authority and do not agree with those of Kiepert's map.

miles	
0	**Siristat,** 150 houses, one-third Greek, with an old church; 3 mosques. Residence of a Kaimmakam.
	Ascend the valley from Siristat in SE. direction.
2¼	Pass through small fir wood (¾ hr.).
3	**Tepe Arasy,** 25 houses (1 hr.). Wide view over mountain landscape. To SE. in distance the citadel of Palaea Isaura; NW. lies the Dalamas Dagh above the village of Dere on the l. bank of Charshembe Su, and in SW. the Gheyik Dagh. On a considerable height beside Tepe Arasy are the ruins of a strong fortress.
	Road ascends from Tepe Arasy.
4¼	Sharp descent to a narrow dark valley (1 hr. 25 min.).
6½	Foot of descent (2 hrs. 10 min.); copious stream from WSW. after a short course disappears into gorges to SE. It is said to be the northern arm of the Gök Su, which rises 2 hrs. from Dedem Köi. Its valley is narrow, and shut in by high mountains, partly covered by vineyards. Route runs along steeper left bank; many springs run down to river.
8½	Cross to r. bank by old Seljuk bridge, **Ak Köprü,** solidly built of blocks of white limestone; 2 arches with circular opening between them (2 hrs. 50 min.).
14	Come into view of village of **Dedem Köi** (4 hrs. 40 min.), 80–100 houses; vineyards and fruit gardens on steep mountain slopes of neighbourhood. The district grows fine apples, quinces, pears, and grapes. No room for cornfields. Heat in summer very great; winter mild. Leaving Dedem Köi ascend very steeply to S. in a narrow valley over crumbling slaty soil.
15	Valley widens (5 hrs. 10 min.); grassy hollows providing pasture for sheep and goats from Dedem Köi. To the l. lower down another village is visible.

miles	
16½	Turn WSW. (5 hrs. 55 min.); on both sides high walls of rock close in and mountain country begins.
17	Turn SE. (6 hrs. 25 min.). Slate ceases and trachyte and white crystalline limestone takes its place; reefs of the latter run across the path, and make it somewhat difficult for horses, as the stone has been worn smooth by the herds of cattle which pass this way in summer.
18½	Trees of the Isaurian mountains cease (7 hrs. 10 min.); wretched grass is now the only vegetation.
19	Descend a little towards SSW. (7 hrs. 25 min.), to a small plain shut in r. and l. by low hills; facing line of route to SSW. is a high summit. In the plain is a plentiful spring; some pasturage.
20½	Turn SE. (8 hrs. 10 min.), leaving high peak to r., up the narrow dry bed of a mountain torrent; way often blocked by large stones which have rolled down.
22½	Emerge on a rocky open plateau (9 hrs. 25 min.), which affords a view of surrounding country. To W. on r. hand at 2 hrs. distance lies the Gheyik Dagh, majestic isolated peak rising precipitously to 10,000 ft.; to l. stretching far to the E. lies another longer range, not so high; between the two a deep valley in which a copious brook flows from SW. and disappears in mountains towards NE.
23	Climb down steep path (9 hrs. 55 min.) to the above-mentioned valley (apparently that of a branch of the Gök Su).
24	Reach bottom of valley (10 hrs. 25 min.), which is 20 ft. wide. Ascend it to SW.
24½	Turn to SE. (10 hrs. 40 min.), and ascend another valley equally narrow.
26	At top of valley (11 hrs. 25 min.), the level of the previous plain is reached and Gheyik Dagh again seen, now to NW. Descend towards SE.

miles

27 Turn to SW. up a rocky valley (11 hrs. 55 min.); to l. deep gorges, to r. steep walls of rock. Gradually the valley widens, chasms and precipices disappear, giving way to a broad, grassy hollow, rising gently to SW.

30 Summit (13¼ hrs.); pass of Yelli Bel (windy pass); violent hurricanes are frequent in this pass, which forms the weather- and water-shed. To the SW. a steep descent; right opposite the pass at 2 hrs. distance view is cut off by precipitous walls of rock.

Descend SW. slope in zigzags; in the depths are pine-trees and a brook flowing S.

31 Foot of descent (13 hrs. 55 min.); here warm Mediterranean climate is experienced; small wooden khan in a neglected condition. Beden 2 hrs. distant. Ascend again to W.

33 Summit (14 hrs. 55 min.); altitude about that of the Yelli Bel. Descend to SW. through thick pine-woods.

36 **Beden,** a poor village of woodcutters with about 20 houses (15 hrs. 55 min.). From Beden continue SW. down the deep valley, bounded on the right by precipitous Ak Dagh, which stretches far to SW.

37 Reach **Sary Kavak,** small village (16 hrs. 20 min.); descent now steeper.

37½ Reach copious brook flowing WSW. (17 hrs. 20 min.); cross on high wooden bridge beside a mill. On the farther side ascend to SW. and then descend to a second brook which comes from high wooded moun-

39 tain on l. (18 hrs. 20 min.). Cross this also on a bridge of planks, and ascend. At top of ascent, full view of Ak Dagh with its long crest of white chalk, across a deep valley. On the SE. slopes vegetation and human habitations.

41 Turn left, to S. (19 hrs. 35 min.) into a deep valley running generally SW. with a brook in a narrow bed;

miles	
	continue along l. bank, a few hundred feet above level of brook. Many springs from narrow valleys on l. flow down to this brook and make the journey difficult. Valley filled with splendid pinewoods.
53	Continue in this valley to a fine spring beneath a large maple tree (26 hrs. 35 min.).
58	Village of **Durbanas** to E. of route in a deep valley protected from NW. winds, watered by many springs with splendid southern vegetation; summer residences of rich Turkish inhabitants of Alaya (29 hrs. 5 min.). Descend to SE. by a very winding track amid pinewoods.
61½	Sea visible through a gap in the mountains (30 hrs. 35 min.).
62	Track turns to SW. (30 hrs. 50 min.); descent steep, almost like a stair; here begins paved track, very much damaged and difficult for horses.
63	Turn again to SE. (31 hrs. 20 min.).
65	Come into view of Alaya to the S. (32 hrs. 20 min.). Steep descent.
68	Reach plain (33 hrs. 50 min.) covered with well-watered gardens, on which lie many country houses surrounded with walls; luxuriant southern vegetation.
71	**Alaya** (34 hrs. 50 min.).

ROUTE 23

ERMENEK—SIRISTAT

This track runs in a general NW. direction. At first it is steep and difficult in many places. On the l. the mountains fall precipitously to the Gök Su, in the valley of which a number of villages are to be seen. Farther on the road improves. **Gargara** village is passed, and (on the r.) **Ivzit.** From here

the track runs through treeless and monotonous country to a bridge at **Dindebol** (2 hrs. beyond Gargara), and thence to **Kyshlar** (1¼ hr. farther) situated among fine gardens. From Kyshlar a good horse-track leads over a high alpine region sparsely wooded and inhabited by a considerable population of Yürüks. After an hour's ride or a little more **Lavdha** village is reached, lying on a stream crossed by a bridge, and 1¾ hr. farther on **Bashköi,** a village situated among trees beneath high mountains. From here the Altyn Dagh lies to E. and the Khadem Dagh to W.

Here the most difficult part of the journey begins. The track runs through gorges in which large herds of small black cattle may be seen, and some camels and goats. **Ipderesi** village, on a stream which is probably a tributary of the Gök Su, is reached 3 hrs. beyond Bashköi, and a second stream is crossed ½ hr. farther on. After another 1½ hr. the track begins to wind through the Altyn Dagh, which divides into many ridges with a main NW. direction, and the valley of **Pirlevgunda** is entered after about 3 hrs. more. The village lies in rather barren country, but is thickly surrounded with vineyards and orchards. Here a river emerges from the rocks and flows along the flank of a long ridge, the **Chal Dagh.**

Hence difficult paths over slippery rock lead in 1½ hr. to **Inerji** village. About 5 hrs. farther on the main northern arm of the Gök Su, which descends through a narrow rocky gorge, is crossed by a two-arched bridge. This is apparently the **Ak Köprü,** mentioned at mile 8½ of Route 22, which may now be followed to Siristat.

From Pirlevgunda to Ak Köprü a track, which appears to be different from the above, passes **Khadem** (*Kaimmakamlyk*), goes westwards over the watershed between the northern Gök Su and the Alata Su, and then NW. down a *dere* past **Gerez** to **Dedem Köi** and **Ak Köprü.**

ROUTE 24

ERMENEK—SELINTI, 92 miles

This route is simply a track through very difficult country. The distances (except for the last 12 miles) are estimated from the approximate times given by the chief authorities used. The track described deviates much from the shortest line; e. g. there is a shorter track (about 9 miles) between Betnam and Feriske.

miles	
0	**Ermenek.** Track runs W. beneath the cliffs of Gozlu Dagh.
6	**Manamas Köprü** over the Gök Su; then ascend to the village of
8	**Betnam** or **Betlam,** through which flows a small stream. [It is possible to go more directly from Betnam to Feriske by **Urghudlu,** but the road is described as terrible, and in places almost perpendicular.] Turn SW. and ascend through forests.
11½	To r. the perpendicular height from which rises the Körüstanbelen; to the l., the country, cultivated in places, first gradually slopes to the S. and then falls perpendicularly to the Göderet Chai.
14	**Ilamos:** to W. and N. the valley is shut in by the wide curves of the Körüstan Dagh. General direction now W.
16½	Cross the **Nava Chai** or **Bash Dere** beside a mill. A little lower this stream flows into the Göderet Chai. On the farther side ascend to the village of **Günde;** then S. through woods.
19½	Cross a height between the Nava and the Göderet Chai. Continue W. along the height and then descend to l. to an isolated rocky cone (Gurva) above the village of

miles

21½ **Fet.** Continue NNW.

24 Cross a small saddle to a spring ; village of **Chukurbagh** to W. ; many rock tombs near here. A short steep descent on the E. slope of the mountain to a second group of tombs and colossal blocks of stone. Thence N. above the Nava Chai which flows in a deep gorge, to

26½ **Feriske.**

Steep ascent to a point close below the precipices of the **Kyzyl Assar** plateau, then to W. past a small nameless yaila and NW.

32½ **Gök Tepe,** a summer village of Selinti, in a lonely mountain valley. Thence SW., at times steep descent, through the finely wooded gorge of Dikenli to the valley of the

37½ **Göderet Chai.** Ascend this valley to the W.

40½ Cross the river.

42 **Gedikbashy.**

S. through mountain forests around the Jidem Dagh and along the valley of the **Mahe Chai :** then over plateau with Yut Dagh and Jangyl Dagh to l., the Mahe Dagh to r. ; finally through rocky country.

57 **Sevasty Yaila.** Thence steep descent to

59½ **Sevasty Güsle** or **Kyshla.**

Descend S. through forest along a small brook.

62½ Turn W. to a spring beside a hut beneath rocks. Cross the **Akkaya** stream, which is formed by the overflow of the spring.

Thence SW. along the slopes high above the **Byjykjy Chai.**

67 Cross a saddle and descend to the valley of the **Maruf Chai.**

72 Cross the Maruf Chai immediately below its exit from a narrow gorge and before its junction with the **Sina Chai.**

Cross the Sina Chai and continue on the E. slopes of the **Günei Dagh,** first SW. then W.

miles	
77	**Günei village.** Descend in W. direction.
80	The track joins the road which runs from Syedra to Selinti and follows it to
92	**Selinti.**

ROUTE 25

KILINDRIA—ERMENEK

This track is in places rough and difficult, passing through a fine mountain district which is little known. It crosses the **Selli Bel** and then runs through **Eleribas** (6 hrs., alt. 3,300 ft.), **Tash Oluk** (8¾ hrs., alt. 4,500 ft.), and **Zeive** (16½ hrs., alt. 2,800 ft.), to **Ermenek** (20¾ hrs.).

The summit (alt. 5,050 ft.) is reached about 7 miles before Zeive.

ROUTE 26

KILINDRIA—MUT

The track runs to **Aine Bazar** (6 hrs.), the summer residence of the Kaimmakam and merchants of Kilindria, and thence either direct to **Mut** (12 hrs. farther) or by an araba road, rough at first but improving later, to **Gök Belen** (Route 26 A) and thence by Route 36.

ROUTE 26 A

KILINDRIA—SELEFKE

Via GÖK BELEN, 54 miles

From **Kilindria** to **Aine Bazar** (6 hrs.) a track crosses the mountain-ridge behind Kilindria, descends into the valley of the Bahardurlu Su and climbs on to the plateau on its northern side. From Aine Bazar an araba road runs over

hilly country to **Selefke** (14 camel- or 12 horse-hrs.). It was reported in 1890 to be well engineered, but in bad repair. Leaving Aine Bazar, and passing a village **Anai** 1½ miles to l., the road climbs through hills to a fountain (3 hrs. from Aine Bazar). A mile farther on a track goes off l. to Kürd Köi. From this point to **Gök Belen** yaila (6 hrs. from Aine Bazar) there is no description of the road. From Gök Belen to **Selefke** the road is that detailed in Route 36. The total distance is about 54 miles.

For an alternative route along the coast see Route 17.

ROUTE 27

SELEFKE—ERMENEK

This road at first follows that detailed (in the reverse direction) under Route 36. At 27½ miles from Selefke it branches to l., following a chaussée which in 1908 was reported as cobbled 16 ft. wide and in bad repair. No further details are available regarding it, except that from the point where the Karaman–Selefke road is left Ermenek is said to lie 30 hrs. W.

ROUTE 28

MUT—ERMENEK, 48 miles

This is a very difficult track through rugged country. Most of the distances have been taken from maps.

miles	
0	**Mut.** Track runs in SW. direction.
1½	**Mut Ören** (**Mut Baghcheler,** ½ hr.) with two magnificent springs. There is abundant water on this (the E.) side of the Gök Su valley.
2½	Cross the N. arm of the Gök Su at **Ymrahor** village. The river is fordable in autumn. Earlier in the

miles

year the crossing would be difficult, as the current is swift and the channel shifts. Thence pass through brushwood (guide necessary) and ascend the cream-coloured tufa hills with which the valley is bordered. They are very steep and sterile and scarcely a drop of water is to be found in this district.

3½ Yürük camping-ground near a tiny brackish spring, last water for hours. Route continues up and down slopes; steep gradients.

The tufa gives place to hard yellow or white sandstone.

Neither grass nor water, only a few stunted juniper trees.

9 Ruins to l. of road on the W. side of a hill.

Cross the last summit; in front, the side of **Adrass Dagh,** separated from the line of tufa hills by very wide and deep ravines full of dense forest.

The mountain forms the edge of a vast plateau, its whole length one series of deep red precipices.

Road ascends the valley of **Beji Su** parallel with the mountain side, passing the village of **Beji.** Rich crops, especially barley, in the valley. Continue up the stream through woods of plane and walnut. Ascent occasionally steep.

12½ Pass mills overshadowed by old plane trees.

Arriving at head of valley, ascend succession of tufa and sandstone slopes towards the NE. corner of Adrass Dagh. Many springs.

Near the summit pass village of **Yalynyzja Bagh** lying high under the NE. cliffs of the mountain.

Continue with deep gorge on l., ascending through well watered country.

23 Summit, reached by a slippery stair of rock. Track passes under a great rock and turns to l. over heights almost equal to Adrass in elevation. Long détours round the heads of ravines.

miles

26½ **Balabolu,** the ancient Palaeopolis, a wilderness of ruins, near which is a yaila.

From Balabolu continue up lonely mountain gorge of **Deirmenlik.** Last ascent at head of valley is as steep as the roof of a house. High bare plateau is now reached, N. portion of Adrass Dagh, known as **Chal Dagh:** no cultivation or grass; hill slopes covered with juniper.

32½ Descend into deep ravine cleft in the limestone plateau called **Korou Deresi,** or gorge of the **Tekichat Su.** The sides are of a light red and cream colour and rise 700 to 1,000 ft. 300 yds. down the *dere* a large clear spring bursts from its side and, swollen by numerous springs on either side, becomes a considerable stream. This valley runs almost due N. and S. Many of the numerous caverns in its sides are inhabited by bee-keepers.

36 Turn to W. up a similar gorge running E. and W. with another considerable stream.

38 Reach a mill and cross river above it. Thence turn to l., up steep ascent through magnificent pines. Track now runs over rough and broken rock; at the top a wide rocky plateau; cross this in SW. direction.

41 Spring above a valley which runs S. to the Ermenek Su between **Yumru Tepe** and **Boz Dagh.**

Thence over a saddle; steep descent to the edge of **Gozlu Dagh.** Here come into view of Ermenek, lying among splendid gardens at the foot of Gozlu Dagh, and of the broad deep valley of the Ermenek Su, surrounded on all sides by mighty plateaus.

Steep descent by rocky stair to

48 **Ermenek.**

(See also Route 29, miles 0–37½.)

ROUTE 29

ERMENEK—SELEFKE

Via DORLA, MUT, and KEBENEK, 83 miles

The first part of this route gives a more direct track between Ermenek and Mut than that detailed in the reverse direction in Route 28. The second part is an alternative to the stage from Mut to Selefke described in Route 36.

miles	
0	**Ermenek.** The track at first follows that described (in the reverse direction) in Routes 28 and 35.
11	Apparently about this point the track branches to l. from that described in Route 28.
18½	Turn E. along the l. bank of a brook, then descend steeply into a beautiful well-wooded valley, dominated to the N. by high mountains.
21	Through a broad valley to the village of **Dorla** (alt. 3,773 ft.).
	Track now runs SSE. over a very broken plateau, with fine woods, enclosed on both sides by high limestone mountains; finally steep descent over much indented slopes to the valley of the Gök Su, which here flows quite slowly between flat banks covered with brushwood, and forms several islands.
30	**Kadyköi** (alt. 360 ft.) on the r. bank of the stream.
	Cross river to SSE. (water up to breasts of horses), then along the broad hilly valley, between rice and cotton fields.
33	**Chalyja** close to track.
35¼	**Kalabakly** to l.
37½	**Mut,** lying a little lower than Kadyköi. Thence SSE. over bare ground cut by many gorges; then gentle descent.
43½	Track now runs along the N. side of the **Gök Su** valley, which alternately narrows and widens. At

miles

times pointed rocks emerge between the road and the river, again the mountains retire leaving flat spaces overgrown with thick brushwood, while at last the rocks approach each other so closely on both sides that one has to ride in the river.

48½ Pass mouth of the **Sarykavak Chai** (alt. 295 ft.), which runs from the N. Rice-fields. The valley becomes more uneven, the river hidden behind limestone hills which are covered with vegetation, and some of which have to be climbed.

55 Chiftlik to l. on the l. bank.

61½ Ascent and descent to **Kash Köi** (alt. 1,764 ft.), high above the gorge in which the Gök Su flows.

Thence a very difficult path over an almost perpendicular wall of rock and descent between planes, lemons, myrtles, and pomegranates to the village of **Kebenek.**

63½ Track descends from Kebenek to the narrow valley of the Gök Su.

66 Along the S. bank and across a tributary.

74½ Steep ascents and descents on difficult rock paths in several places where the river is narrowed by rocks (alt. 262 ft.).

Continue, following the traces of an ancient road, finally through many remains of ancient buildings down to the plain, which is cut by the windings of the river, now very rapid.

79 About here the track joins the road detailed in Route 36.

83 **Selefke.**

ROUTE 30

SELEFKE—MUT

Via MAGHARA, 79 miles

For about 16 miles this route follows the chaussée to Maghara and Karaman constructed by Said Pasha in 1885. There are no details regarding this chaussée from that point to Maghara. It is described as being barely passable for an *araba* owing to the disrepair into which the road has fallen.

The route detailed here from mile 16¼ to Maghara appears to be frequently followed, as there are good wells at Uzunjaburj and the détour necessary adds little to the total distance. There is no evidence to show whether it is passable for wheels.

Beyond Maghara the details up to mile 46¼ apply to the main road between that place and Mut. From mile 40¼ onwards there is no evidence for the main road, and the route detailed is perhaps not the one usually followed. There are frequent steep ascents and descents. At mile 58½ there is a descent of 1 in 11 which is difficult for laden animals, and in the gorge beyond Sarykavak (mile 59) the road is described as 'almost impossible'. It might therefore be better for this stage to follow the alternative track mentioned under mile 51. The distances given in the itinerary are taken from Herzfeld's route-map.

miles	
0	**Selefke.** Route crosses the Roman bridge and runs in N. direction, between cemeteries.
1½	Alt. 20 ft. Steep ascent begins, the route running up the mountain side in many zigzags.
2½	Alt. 433 ft. Road makes two loops to l. and r.
3½	Alt. 688 ft.
4	Deep gorge on r. with stream running S.
5	Alt. 771 ft. District known as **Pambukly.**
6	Turkish cemetery on r. Extensive view to SW.

miles	
6½	Many ancient tombs on l.; on r. ruined building.
7½	**Göljik,** among many ancient tombs and ruined buildings.
8	Cistern on l. Road now runs through thick forest and occasional cultivation.
9	**Meidan,** large tower of polygonal masonry a few yds. to l.; view of sea at mouth of Gök Su to SE. Continue past many tombs.
10	Ancient watchtower on l. (alt. 2,280 ft.). Road passes through brushwood.
10½	Cemetery on r.
11¼	Small stream, the **Mersendi Chai** (alt. 2,380 ft.). To r. the stream flows in a deep winding gorge. Steep ascent.
12¼	Alt. 2,680 ft. Traces of ancient paved road.
13¼	**Kyzyl Mezeli,** entrance to narrow gorge of Yangyly Boghaz.
15¾	Stalactite cave known as Damlama Jenini on l. Here the gorge widens.
16¼	Said Pasha's chaussée branches NW. to Maghara. Present route turns to r. and runs in a general N. by W. direction.
16¾	**Sai Deirmen,** mill on r.
17¼	Alt. 3,330 ft. The road now runs up another gorge through thick forest.
18¾	Alt. 3,533 ft.
20¼	High tower; road runs among tombs and ruins of temples.
21¾	**Uzunjaburj.** Several good wells. Yaila among ruins. The road now runs E. through forest.
24¾	Alt. 3,268 ft. Ruins of town now called **Ura;** aqueduct at the head of a deep gorge, **Sheitan Dere,** which runs down a track to the coast near Kyz Kale (see Route 32). Road turns N. again over a plateau with brushwood and some cultivation.

miles	
27½	**Kuljaly** (alt. 3,563 ft.), with a deep well.
28½	**Tekiroghlan,** a large Yürük settlement with ploughed fields. Road turns NE.
29	Well on l. Road runs at first NE., then winds towards N.
31	**Örenköi** (alt. 3,822 ft.), on a high rock at the opening of a valley which enters the Lamas gorge from the W. From the rock, the side of the gorge falls almost perpendicularly to the waters of the Lamas. The walls of the canyon are nearly 1,000 ft. high, with pine-covered slopes at the foot. From Örenköi road ascends NNW.
32	Alt. 4,040 ft. Road now makes many windings.
35	Alt. 4,110 ft. Road again turns to W. To E. rises ancient fortress of **Birene,** on the r. (W.) side of Lamas Su canyon. Through oak forest to
37½	**Akche Göl Gedir** (cistern). Thence road runs NW. passing a rock on which reliefs have been carved, on r., with **Karakütük Dagh** on l.
38½	Alt. 4,593 ft. Foundations of a house hewn out of the rock on r.
39¼	Greek cemetery on l., spring on r. Here the road from Yangyly Boghaz comes in on l. Thence past Yürük camping-ground.
41	**Sai Deirmeni,** beginning of Deirmenjik Boghazy, in which road runs NW. past an aqueduct and several caves.
42¼	**Maghara** (alt. 4,265 ft.), small village of about 80 houses (Armenians and Greeks). Spring. Road now ascends towards W. through fields and along mountain slope, with fine view over undulating valleys to N.
43¼	Alt. 4,540 ft.
44¾	Stream, up which runs road to Kavak on r.
45¼	Tombs on both sides of road.

miles	
45¾	Stream.
46¼	Main road to Mut runs off here to W.
47¼	Yürük camping-ground (alt. 4,363 ft.); another stream and some cultivation.
49¼	Summit (alt. 4,465 ft.). Descent begins to a small plain with several villages.
50½	Alt. 4,088 ft.
51	**Chatak,** small village on a stream among vineyards. To the N. rises Kyja or Karjy Dagh. Road continues along bank of small stream.
52	Road crosses stream.
53	Track now enters valley of another stream flowing SW. (alt. 3,700 ft.). This valley descends gradually, first SW. then W., the last part of the descent being very steep.
56	Tombs on both sides of road. Continue in W. direction between perpendicular walls of rock.
58½	**Dede,** small village (alt. about 2,625 ft.). Precipitous descent of about 1 in 11, difficult for laden animals.
59	**Sarykavak** (alt. 1,296 ft.), in a deep hollow surrounded by walls of rock over 2,600 ft. high. The hollow is well watered and very fertile, with fruit trees of all kinds; dense population; heat very great. The road out of Sarykavak is described as 'almost impossible'. It enters the gorge of the **Narly Su,** a small tributary of the Gürt Su, through gardens and vineyards.
60	Cross stream by a bridge at **Pambukly.**
62	**Narly.** Road turns W. over the ridge between Narly Su and the Gürt Su.
63½	Summit (alt. 2,854 ft.). Road turns NW.; to the N. lies Akkaya.
65½	Alt. 3,914 ft. Road turns sharply SE. and ascends.

miles	
67	Saddle between Akkaya and Dede mountains (alt. 3,943 ft.).
67½	**Haji Ahmetli,** village; road turns W.
68½	Saddle (alt. 4,435 ft.); road turns NNW.
69¼	**Zeikir** spring.
69¾	Saddle (alt. 4,330 ft.). An alternative road from Maghara to Mut by **Chukurbagh** comes in hereabouts.
	[This track, probably easier than that detailed here, runs NW. up the stream to Chukur (2 miles) and thence by steep zigzags to the summit of a pass, whence an easy descent follows to the canyon of the Maghara Chai. Beyond this gorge the track descends to that of the Gövden Chai, which is crossed at Ak Köprü, ascends SW. to a summit, and drops down to Chukurbagh, in a fertile valley surrounded by mountains. It apparently joins the present route at mile 69¾.]
71¾	Spring on r.
72¼	Stream, beyond which the road runs between ancient tombs (alt. 3,180 ft.). Road turns SW. and descends.
72¾	Stream.
73¾	Stream (alt. 2,480 ft.).
74¼	**Kaltyla** village.
76	Alt. 1,690 ft. Descent to valley of stream.
77	Village on r., another across stream on l. Road crosses a tributary and winds over a ridge.
78½	Road crosses a small stream (alt. 1,109 ft.), beside an aqueduct.
79	**Mut** (alt. 1,050 ft.).
	See also Route 29, miles 37½ to 83.

ROUTE 31

SELEFKE—MERSINA, 57½ miles

This road is broad and, though in defective repair, is easily passable for wheels. From Lamas Khan (mile 29) to the Alata Chai (mile 33¾) it would be muddy in wet weather.

miles	
0	**Selefke.** The road crosses the Gök Su by a fine Roman bridge, and runs between marshes to the foothills.
2	Spring on r. of road. Cultivation in the plain.
3¼	Road bends ESE., skirting an arm of the Gök Su.
5¼	**Hüdede Tepesi,** isolated hill to r.
	Hüdede village on l. Road leaves the river and bends round to a general ENE. direction, skirting the hills on l.
6½	**Tekir** or **Kuyungu,** small village on l. A short distance on there is a fine spring, **Kainar Punar** on r.
8½	Small village (? Avshan) on r.
9	Road crosses the **Mersendi** (or Pershendi) **Chai,** often waterless. It comes from a ravine on l.
	Rock-spring a little to l.
10½	**Chok Ören,** ancient ruins near the sea at the E. end of the Selefke plain. Heat and mosquitoes make the place unbearable in summer. The route now runs close along the coast between it and the hills.
	Gentle ascent over a spur past numerous ruins.
12½	**Kuru Dere,** narrow ravine which the road crosses. On the other side it winds up and down over projecting spurs which rise to a height of about 300 ft.
15½	**Tatly Su** or **Sorvuk Su,** small sandy bay used by charcoal-boats. It is surrounded by wooded heights on which are isolated ruins. Fine spring of good water close by sea. The valleys in the neighbourhood are filled with shrubs. From here an ancient paved

miles

road leads up to the Corycian cave, ½ hr. distant (see below, mile 17½).

16½ Small bay suitable for boat-landing.

17 Ruined castle on r. and another called **Kyz Kale** on a small island.

A short distance on the road passes, on l., a deep precipitous and waterless ravine filled with evergreens and oleanders. The ravine is called variously **Sheitan Dere** (Devil's Valley), **Deli Su,** or **Maltepe Su.**

17½ **Korgos** (anc. Corycus), ancient ruins; fortress and mole; 3 miles inland in the hills is the famous Corycian cave, some 900 ft. in length, now used by nomads as a shelter for their flocks and herds of camels.

19 Road crosses a stream.

19¼ **Ayash,** numerous ancient ruins, half-buried in sand, the site of Elaiusa Sebaste. The harbour is silted up. The promontory near the ruins has been formed by the junction of an island with the mainland.

An ancient paved road leads inland past the village of **Kyzylbagh,** where good water is obtainable in a modern reservoir. A little agriculture in a wilderness of scrub and stones.

21¼ Road crosses a water-course.

22½ Road crosses a second water-course and ascends and descends, past ruins, over low spurs.

24½ Small sandy bay which in ancient times formed the harbour to the town of Kanytelis (mod. **Kanidivan**), whose ruins lie 4–5 miles inland. An ancient paved road leads to them, steep at first, then easier, through rock country covered with scrub and woods.

To l. part of the ancient aqueduct which brought water to Ayash from the Lamas Su.

25¼ Road leaves the shore and ascends over a spur.

25¾ Summit. Sea about ¾ mile distant. **Ak Kale,**

miles	
	ruined castle and village to r. overlooking the sea. Scrub and fields between castle and road. Ancient triple gateway on r.
	Gentle descent.
26¾	Foot of descent.
27¾	Road now runs in a narrow valley spanned by the ancient aqueduct, and then runs along the slopes fringing the coast. Isolated ruins to l.
29	**Lamas Khan** on the r. bank of the Lamas Su. The village is 1½ mile to W. Road crosses river by a stone bridge. The river is unfordable in spring.
30¾	Road crosses a small stream.
	Mutessaryfyn Chiftlik. The foothills recede from the coast.
32¾	Road crosses the **Kara Su.** On a spur are fine ruins surrounded by a quadrilateral wall with corner towers.
33½	**Erdemli** village ½ mile to l.
33¾	Kahve and rest-house on r. bank of **Alata Chai.**
	Road crosses the river by a strong bridge. The stream has several channels, easily fordable.
	Alata landing-stage is on the l. bank at the river-mouth.
35½	Road crosses the **Al Su;** some trees here.
37	Road crosses two branches of the **Arbaj Su** by wooden bridges. The streams are easily fordable.
38½	Tumulus with guard-house and ruins.
39	**Tümük** landing-stage on r. for chrome-mines in the neighbourhood.
	Tümük village is some distance to l.
41	Road now crosses low undulations broken by some marshy streams.
42½	Trees to r. and l.
43¼	Road crosses the **Gilindere Chai** by a stone bridge with a pointed arch.
45¼	Fountain to l. Some pasture here.

miles	
45¾	Road crosses the **Teje** (Deje) **Chai.** Ruins of **Teje Kalesi** 1 mile upstream due N. Trees on either side of road.
47	Road crosses a wadi.
48¾	Road crosses the **Fyndyk Punar Chai.**
50	Two stone pillars on r.
	Mezetli village 1¼ mile to l. at the foot of the hills.
50½	Fountain to l.
51	Ruins of **Pompeiopolis** on a promontory to r.
51¼	A road branches SSW. to Pompeiopolis. Road crosses the rapid **Mezetli Chai** by a stone bridge.
52½	Road crosses a small water-course and runs through cultivation.
55½	Sand-dunes to r. Another small water-course.
56½	Gardens and village of **Mufti Mahallesi** at the mouth of the **Güzel Dere** or **Deli Su.** Mersina light-house to r. on a promontory.
	Yeni Köi village 1 mile to l. upstream.
57½	**Mersina.**

ROUTE 32

MAGHARA—LAMAS, *via* URA, 48 miles

This route follows that detailed in the reverse direction in Route 30 as far as **Ura** (17½ miles). It then continues for about 2 hrs. down a deep winding gorge, which is followed by an ancient road of remarkable solidity, with very steep gradients and very slippery surface. There are many tombs along the road and considerable remains of buildings and forts of hewn stone at one point. On emerging from the gorge the track crosses a rough rolling plateau, about 10 miles broad. The country here is very difficult, stony, waterless and overgrown with brushwood. Ruins of two large towns are passed at places called Kavakly and Hassan Aliler,

beyond which the track continues generally SE. past the Corycian cave and thence on to the chaussée which runs from Selefke to Mersina (see Route 31, mile 17½).

ROUTE 33

LAMAS—MAGHARA, 36 miles

This is a regular caravan-road. The distances up to Örenköi (mile 24¾) are estimated from the times given by the traveller whose notes have been used.

miles	
0	**Lamas,** small and insignificant village from 1½ to 2 miles inland, N. of **Lamas Kalesi.** It lies on the r. bank of the Lamas river, at the mouth of a huge gorge.
	Direction N. of W.; road ascends steadily in zigzags, and is exceedingly rough.
2¾	Summit of ridge (1 hr.); on r. immense gorge with perpendicular walls running N.
	Pass along watershed; on r. water goes to Lamas Su, on l. directly to sea.
6	Ruined village, with many doorways still standing erect (1884).
8¾	Summit (3¼ hrs.) at ruins of another ancient village, similar to the last. Hence descend to
10	**Göyerek,** village (3 hrs. 35 min.) situated in a basin in the mountains perhaps a mile wide. Continue in same general direction.
12	Ancient cemetery with sarcophagi (4 hrs. 20 min.); the surrounding country is a great undulating plateau, exceedingly rocky and dreary.
13	Ruins of large Graeco-Roman village (4 hrs. 40 min.); several doorways and arches still standing. The site is now a Turkoman yaila; ancient cistern

miles

of well-hewn stones still used at present day. Continue NW. to

24¾ **Örenköi** village (8½ hrs.). The village of **Kyzyl Gechit** is situated down in the canyon on the l. bank of river a little below Örenköi.

Road now follows that detailed in Route 30 from mile 31.

36 **Maghara.**

ROUTE 34

KARAMAN—SIRISTAT, 61½ miles

This route seems to be fairly easy. Fuel is scarce till Bashkyshla is reached at mile 18.

The route which appears to be more generally taken between Karaman and Siristat follows the chaussée to Konia to beyond Kassaba, and then runs in a general W. direction joining the route here described at Sary Oghlan (mile 43½). See vol. iii, part 2.

miles

0 **Karaman.** Direction SW. over the plain.

6 **Gökdere** village, lying on hills. Thence along the dry bed of the **Gündere Su.**

9 **Gündere** village (alt. 3,832 ft.) at the entrance to the mountains.

Over several ranges separated by deep valleys to

18 **Bashkyshla** (alt. 4,717 ft.) on the flat edge of a deep, narrow, wooded valley.

WNW. along the wooded S. foot of **Haji Baba Dagh.**

22½ **Kyzyl Yahya.** Continue in same general direction to

27 **Mashted.** Remains of ancient architecture and sculpture here.

Descend to

33 **Turaida** (alt. 4,987 ft.), in a valley which runs S. to the Gök Su.

Continue through flatter wooded country to

miles	
43½	**Sary Oghlan** (alt. 4,422 ft.), on a plateau where the trees are more sparse. Continue WSW. over the plateau.
47	Turn W. over wooded slopes to the village of
53	**Aijilar** (? Hajiler), built between limestone rocks. **Assar Kalesi** or **Zengibar Kalesi,** ruins of ancient Isaura 3½ miles (1 hr.) to S. lying on a height surrounded by a level valley (alt. 4,576 ft.) on N., NE., and NW.; many ruins and a spring of fresh water.
61½	**Siristat,** the chief town of the Bozkyr kaza in the merkez-sanjak and vilayet of Konia.

ROUTE 35

KARAMAN—ERMENEK, 55 miles

This is a mountain track through country very sparsely inhabited. The last 5 miles of this route seem to coincide with those of Route 28.

miles	
0	**Karaman.** Direction SSW. over undulating plain.
3	Cross the deep narrow **Kuru Dere** (1 hr.). Thence over a plateau furrowed by deep gorges, with **Haji Baba Dagh** on r., over a range of heights which join the **Ali Bey Dagh** lying to the SW.; then across another narrow valley.
9	**Boyalar** village (alt. 4,700 ft.) (4 hrs.). Continue along a deep valley, the walls of which are composed of tertiary mussel-deposits.
10½	Leave valley (4½ hrs.); thence over rounded, brushwood-clad mountains, separated by narrow valleys, to a valley beside the village of
17	**Kemranly** (**Meliss Tepe** ?) (7 hrs.). Thence SSW. over flat hills.
18½	Gradual descent towards two immense massifs, extending from NNE. to SSW., the southernmost

miles

being Gilibel Dagh (7½ hrs.); finally precipitous descent between rocks clad with luxuriant vegetation past waterfalls to the deep valley of the **Bujak Chai.** The stream rises not far to the E.

23½ **Bujak Kyshla** (9½ hrs.). Fine spring and rich vegetation.

25 **Bostan Su** (Bostan Özü) village (alt. 1,764 ft.) (10 hrs.), a few yards up the slope of the western massif **Bujak Dagh.** The river is impassable in winter.

Thence SSW. up the northern outliers of the lofty **Top Gedik Dagh,** through forest at first luxuriant, afterwards sparser.

32½ Summit (alt. 5,905 ft.) (13 hrs.). Thence descend to a grassy plateau, and cross a second ridge.

35 **Gilendi,** old khan beside a rapid brook in a valley running NNW. and SSE. (14 hrs.). The track here crosses the boundary between the vilayets of Konia and Adana. Steep ascent to central chain of the Top Gedik Dagh.

40 Cross a saddle running from N. to S. (alt. 6,560 ft.) (16 hrs.); the peaks on either side rise 1,600–1,900 ft. above the road.

45 Descent to the valley of Bashlykan Deresi (or Bakluzan Deresi), watered by a tributary of the Gök Su (18 hrs.). The valley soon narrows to a gorge with walls of horizontal layers of limestone; numerous caves. The bed of the valley is strewn with boulders.

Cross the brook (20 hrs. ?), ascend the western slope and continue S. over a stony plateau. Then very steep descent to

55 **Ermenek** (alt. 4,068 ft.), on the southern slope, in the valley of the Gök Su (20 hrs. or 22 hrs.).

[N.B. There is some doubt regarding the times taken in the latter part of this route. Possibly the distance from Bashlykan Deresi to Ermenek should be 5 miles.]

ROUTE 36

KARAMAN—SELEFKE, 110 miles

This road leads through sparsely inhabited country. It was reported in 1908 that the earthwork of the chaussée which was then in process of construction would be completed throughout by the end of the year. At that time it made a good pack road, and Turkish officials stated that it was proposed to make it passable for wheels. The gradients were fair, but much work required to be done in making culverts and clearing boulders.

The distances given below are those estimated by the chief authority used. The altitudes are from comparative readings by aneroid. They are higher than those given by another traveller who crossed this country in 1907.

The details of travelling conditions noted in the text represent those normal in early summer. It was reported that in spring, owing to irrigation, there was no track over part of the stage from Karadiken to Yenije (mile 63 to mile 69).

There are alternative routes over certain stages. One of these runs in a general SE. direction from Karaman, through Fysandun village (4½ miles) and thence S. to join the route here detailed about 6½ miles farther on.

There is said also to be a path (for which a guide is required) which leaves the main road a short distance beyond the summit (mile 23) near a fountain. This track leads down a grassy valley where there are good wells and a Yürük yaila and thence over low, pine-clad ridges to Kestel village (2 hrs. in the reverse direction), near the head-waters of the Pirinj Su. About ½ hr. N. of Kestel are the remarkable ruins of a city called successively Coropissus, Hierapolis, and Sibila (alt. 4,300 ft.); and 10 min. NE. are some deserted huts called Da Bazar where water is obtainable. Beyond Kestel the track ascends obliquely out of the Pirinj Su valley and passing a spring crosses an undulating wooded plateau

(alt. about 4,900 ft.). From the plateau there is a zigzag descent down the l. side of a gorge passing by a conspicuous isolated rock. At the mouth of the gorge is a fountain (alt. 3,800 ft.) from which the track descends nearly S. to Ilija (see under mile 43 ; about 9½ hrs. in the reverse direction from Kestel and 1½ hrs. from the fountain last mentioned).

Between Zeniye (mile 73) and Gök Belen (mile 89) there is a longer route which ascends steeply to Alaklissia (2¾ hrs. in the reverse direction), a Greek village, most of whose inhabitants are ignorant of Greek. Beyond Alaklissia the track runs through fairly open country which becomes more rugged about 10 miles farther on. It winds along the N. side of the hills, rounding the heads of the *deres* to Gök Belen (5 hrs. from Alaklissia in the reverse direction).

About Balandyz (mile 93½) another alternative track branches from the main road and rejoins it about 9 miles from Selefke (3 hrs. in the reverse direction). This track is variously reported as saving ½ hr. or 1 hr. on the time taken over the chaussée.

miles	
0	**Karaman.** Road leads S., leaving Said Pasha's cart-road to Maghara on the E.
3½	Leave stream, last water for 3½ miles. Track ascends low bare hills commanding the town and follows T. L. (single wire) to Selefke.
	No road, but track passable easily in good weather by wheels as far as Kozlu Bujak (mile 17).
4½	Alt. 3,550 ft.
10½	Alt. 3,950 ft. ; still bare open downs.
13½	Country improves—road ascends a broad cultivated valley.
17	A good spring with one water-trough. **Kozlu Bujak** village lies on opposite (i. e. W.) side of valley. The cart-track is now replaced by the earthwork of a chaussée in course of construction. A few firs here, but rapidly disappearing through being used at Karaman for fuel (alt. 4,150 ft.).

miles	
20	Chaussée (earthwork only) zigzags over a gorge 500 ft. deep; stream at bottom. From here the road ascends easily, passing a shelter khan (**Bozuk Khan**); flanking hills low and easily climbed.
23	Summit of **Karjasekmez** (Karasekiz) pass. Watershed between sea and Konia plain (alt. 5,050 ft.). The new chaussée earthwork ended here in 1908.
23½	Very steep and stony descent to an old khan (**Zartavul Khan**), and stream on a steep-sided wooded valley. This is far the harder side of the pass, but the road can be engineered with little difficulty.
27	After about 2½ miles down this valley road bends E. and crosses a small ridge into parallel valley, leading into that of the Gök Su. Below ridge is a large open camping-ground, **Zartavul Yaila.** The spring is a strong one and in open ground. Yürük grazing ground. Due S. in the Gök Su valley lies Grauvga.
32	A stony track under sandstone cliffs at a high level above Gök Su valley, but nowhere at all difficult; junipers and Scotch firs. **Sinekji** is the name of a large cave below the track used for shelter in bad weather.
33	Earthwork of chaussée from Mut had reached this point in May 1908.
38	**Ala Khan,** in ruins; a fine spring with 3 troughs and room to camp. **Ala Khan** monastery (wrongly called Khoja Kalesi) lies on the precipitous slope of the plateau to E. 1 mile to r. of the road are two villages on either side of a small stream.
39	Alt. 3,650 ft.; fine fir-trees, gradient of earth-work would be severe here for wheels.
43	Alt. 1,600 ft. (At about this point there appears to be a small spring called **Ilija** to r.)
45½	**Zeitenek,** a small farm. From here the road crosses a broad cultivated valley.

miles

47 **Yapanly** or **Yaphynjy** (Yapunlu), village and spring to r.

48 An old stone bridge, single arch, over stream called **Pirinj Su** or **Kestel Su.** 2½ miles below the bridge this stream joins the Gök Su.

54 Road leaves Yapanly valley over low hills into the parallel valley of **Mut.** New road-bridge in course of construction. Forage abundant from June to October. Plenty of water; many mosquitoes in summer. (Alt. 1,100 ft.)

59 Road descends through fields of wheat and barley to river opposite a ruined bridge of Byzantine construction over the Gök Su (alt. 450 ft.). The road is only fit for pack traffic, but could easily be improved: The river on May 18, 1906, was 80 yds. broad, running 6 miles an hour and unfordable. It is said to be fordable in autumn. Banks easy in places.

63 Bad track under hills along l. bank to **Karadiken,** small village with one small ferry-boat; 1 horse might cross in it with difficulty. There is also a ford.

There is no track in spring through the irrigated fields between Karadiken and Yenije. In autumn it is easy.

69 **Yenije.** Small village with rope and pontoon-ferry. The pontoon is open-ended, holds 2 horses or 3 ponies at a time. The rope is stretched from bank to bank and passes between posts in the pontoon. Haulage by hand; approach on the Yenije side very steep and bad. River here 60–70 yds. wide, very swift and steep-banked, liable to sudden floods (alt. 200 ft.). Time spent in taking over 7 horses, 3 donkeys, and 4 loads (including reloading on the far bank), ¾ hr.

70½ Track bad or none, round irrigated fields and over small steep hills to a stone bridge over a tributary.

73 **Zeine** or **Zeniye,** a hill village (alt. 1,000 ft.); well-

miles	
	built mosque; many fruit trees; good water; bad track leading up to it.
76	**Kapak Su.** A very steep and stony track leads up to an open glade and a stone fountain (alt. 2,300 ft.).
79	After passing two watering places, a plateau covered with dwarf oaks is reached.
82½	The road to Ermenek branches to r. (see Route 27).
89	**Gök Belen.** A summer village much frequented by inhabitants of Selefke (alt. 2,900 ft.). It lies in a basin in the hills.
90¼	Along a narrow barley-growing valley to a drinking trough.
91	Alt. 3,200 ft. Road from here descends to Selefke.
93½	**Balandyz,** small village. Alt. 2,800 ft. Water in the village.
102	**Gaelin Cheshme,** small spring and café. No water between here and Selefke.
103	Up to this point the road from Gök Belen (mile 89), about 16 ft. wide, was fair going in 1908. Here, though still wide with a good gradient, there was no surface.
106	A track from Mut by Kash Köi and Kebenek comes in on l. (see Route 29).
110	**Selefke.**

ROUTE 37

MAGHARA—KARAMAN, 54 miles

This is part of the road constructed by Said Pasha during his governorship of Konia. It is described as passing through bleak country inhabited only by stray Yürüks. The route detailed below apparently leaves the chausseé about mile 5 and rejoins it at mile 11½.

There is no evidence to show whether the road is still fit

for wheels. It has never been much used as there are practically no supplies and little water along the route. It has consequently fallen into much disrepair.

The distances are calculated from the times given by the chief authority used and are only approximate.

miles	
0	**Maghara.** Up to the time when Said Pasha's chaussée was constructed Maghara was merely a Yürük settlement. When it became a halting-place for caravans the prospects of business attracted Greek traders who bought out the Yürüks. There are now 20 Greek families, who are said to drive an excellent trade from April to October when the pass is open. There are 5 shops. Road ascends to N.
5	S. edge of plateau. A little higher there opens up, to the E., a view over a green elevated plain with a yaila (? Karatash Yaila): the brook which crosses it runs in a deep gorge to the Lamas Su. The road to Korash runs off here.
	Continue up lonely gorges along the old caravan road.
10½	Zaptieh post on the plateau of Alambosagh. Track crosses rocky heights.
11½	**Müshirdim Kuyu,** spring. Here the main road is rejoined. It ascends NW. and then W., with wide prospect over the uniform hills around.
17½	**Haj Punar** gorge. Direction changes to N.
19½	**Sultan Alan,** a few huts (alt. 5,600 ft.).
21	Summit of wide rough plateau at **Yedi Bel** (alt. 5,770 ft.). To NE. rise a few isolated mountain-peaks. Road continues over the highland, first N., then NW., and finally W.; magnificent view of Lycaonian plain.
34½	Well, beyond which is a ruined village.
36	**Gödet** (? on a stream of the same name). Alt. 4,760 ft. Continue in NW. direction over monotonous heights which slope gradually to the N.; **Meyil Dagh** to r.

miles	
39¾	**Kyzyl Cheshme** (? stone) bridge.
41¼	Pass a few huts. Continuous descent NW.
45¾	**Abajyj Cheshme** spring. Thence in the same direction down the valley of a brook (? the Gödet Su).
51¾	Turn W. across the plain.
54	**Karaman.**

ROUTE 38

EREGLI—KARAMAN, 57 miles

This road is reported passable for wheels, and is the most direct route between Eregli and Karaman. There are strong stone culverts over parts of the marsh round Sidivre (mile 45).

For the railway between Eregli and Karaman see vol. i.

miles	
0	**Eregli.** Road runs over plain, S. of Ak Göl.
10	A road to Maghara branches to l. See Route 39.
19	About here is the *düden*, near the W. end of lake, by which the flood waters escape.
24	**Ambar Arasy** or **Serpek,** site of an ancient town. Road continues through **Kaleköi.** The **Divle Su,** which flows N. of W., is divided up above Kaleköi for purposes of irrigation and is finally entirely used up in this way. Direction now NW. to **Kara Aghaeh.** Thence SW. through a low wide pass in the mountains which finally end in the mass of **Kara Dagh.** Once through these low mountains, head S. of W. along the mountain slopes, with the plain of Karaman on l.
45	**Sidivre,** situated on a vast swamp, difficult of access in winter. The swamp is formed by the water of the Ibrala Chai and other streams. From Sidivre cross the plain, passing **Jen Hassan Chiftlik,** to
57	**Karaman.**

miles

A more southerly route from Karaman to Eregli, keeping nearer the railway, is described as follows. It coincides with Route 38 for the first 12 and the last 10 miles.

The railway had not been constructed when this description was written.

0 Leave **Karaman,** and cross the plain.

8¼ Old cemetery. To the l., **Eski Güdümen** and **Yeni Güdümen** at some distance.

9 **Jen Hassan Chiftlik,** a small hamlet among willows.

11 Cross a stone bridge; a little farther on, a well.

12 **Sidivre** village.

16 A subterranean cistern, on the r., reached by 27 steps, and a well. To r. and to l. Yürük yailas.

20 The telegraph line crosses the road from r. to l. The road passes near hills on the l.

24 **Ada Tepe Chiftlik,** so called from a small isolated hill in the middle of the plain.

27 **Kurtuma** to r.

28½ **Hüyük Burnu** to l.

31½ A group of four or five houses.

33 A *devrent* called **Airanjy Chiftlik,** occupied by five soldiers. Immediately after cross a dry *dere* by a bridge formed of a single block of stone. The telegraph line is on the l. Direction NE. Pass a defile and enter another wide treeless plain.

41 **Aghyz** to r.

44 **Duajyk (Boyajyk** ?) and the telegraph line to l. Route turns N. to avoid mountain on r.

Pass through a defile and re-enter the plain. Hereabouts (mile 45) Route 38 comes in on the l. Direction E., telegraph line to r. On the l. in the plain two clumps of trees. Road goes along the foot of mountain on r.

50½ **Melikli** among trees to r., between the mountain and a little hill nearer the road.

miles	
	Three villages to r., at the foot of the mountain.
51½	Cross a hill at right angles to the road. Slight rise in level. Soil now well watered and fertile.
55	**Eregli.**

ROUTE 39

EREGLI—MAGHARA, 71 miles

This route is well supplied with fodder and appears to be fairly easy. The native estimate of time for the total distance is 24 hrs.

miles	
0	**Eregli.** Road coincides for first 15 miles with post road to Karaman (Route 38, southern branch).
15	Road leaves plain and strikes over bare swelling hills.
24	**Divle,** large Turkish village. Thence gradual ascent over treeless and uninteresting country.
31	**Hamza Yaila** a little to r.
37	**Korash,** double village on a stream.
40	Road enters park-like grassy country, studded with cedars; ascent becomes steeper.
44	**Perchin Bel** (? alt. 6,350 ft.); fine grazing land in this neighbourhood. Below Perchin Bel, **Perchin Yaila.** Road now lies along the course of a stream whose banks afford rich grazing and on which large herds of horses and camels are maintained in summer. This stream is said to flow into the Lamas.
52	Road now climbs over bare hills on the l. bank.
54	Summit, 6,200 ft.
65	Track descends a rocky gorge to the Selefke road
71	**Maghara,** alt. 4,590 ft.

ROUTE 40

BOZANTI KHAN—EREGLI, 56 miles

This road is part of the famous route through the Taurus range by the Cilician Gates. It is fit for wheels throughout. Through the gorges in the earlier stages the gradients are well engineered and the surface is excellent. There is little evidence regarding the state of the road from Ulukyshla (mile 29¾) onwards, and between that point and Chayan (mile 39) there appear to be one or two steep ascents and descents.

From Bozanti to Ulukyshla the Baghdad railway accompanies the road and crosses it at several points. At Ulukyshla it breaks off to NE. and is met with again near Bulgurlu. Telegraph (5 wires) follows the chaussée.

The Taurus range marks the limit between the moist climate of the sea-board and the severe climate of the plateau. Snow-storms are frequent in winter, rendering the road impassable.

A good many of the distances given below are trocheameter measurements; others are travellers' estimates based on the Turkish kilometre stones. From Chifte Khan (mile 12½) they are considerably shorter than those given by the most recent route map (Herzfeld's), but the evidence available is insufficient to show which authority is to be preferred.

miles	
0	**Bozanti Khan,** alt. 2,680 ft. Bridge over small tributary of the Chakyt Su. Road runs N. by E. up r. bank passing several ruined khans.
½	Route to Kaisari by the Kamyshly Boghaz branches to r.
	The valley narrows; road bends NW.
3½	**Ak Köprü** (alt. 2,860 ft.), a broad level stone bridge, approached by high embankments on either side.
	A spring called **Sheker Punar** runs out through a small tunnel in the substructure.

miles

The rocks have been blasted along this stage.

Above the bridge is another very large spring called **Kara Su.** The water is bad and produces fever.

At the N. end of the bridge is a new khan, very bad and dirty. Guard-house here.

Railway remains on r. bank.

The sides of the gorge now close in. On the S. the mountain rises nearly perpendicular to over 1,000 ft. On the N. the hills are nearly as high, but slope more gradually. Road excellent.

3¾ The rock here was cut in Roman times and has been blasted in recent years.

7 Road crosses the **Takhta Köprü** (alt. 3,010 ft.), a wooden bridge resting on stone pillars over a stream which comes in from the N. from the Tyana plain. Horse-road to Kyzly Hissar (Tyana) and Nigde runs up its valley.

Ruins of the old bridge near the one now in use.

9¾ A road branches to r. to the Hammam ('Hot Baths') of **Ilije,** which lies out of sight several hundred yards from the road.

10¾ Road crosses the water which comes from the baths. Water warm. Valley becomes more open. The road from the Hammam comes in on the r.

12½ **Chifte Khan.** Guard-house (alt. 3,050 ft.). Here a stream from SW. comes down a narrow valley and joins the main stream. It flows from Bulghar Maden, where there are mines of argentiferous lead, past the village of Ali Hoja. A bad hill-track follows the general course of the stream to Bulghar Maden (4 hrs.).

Road crosses to r. bank beside the khan. Railway ascends l. bank. The hills now close in. Fairly steep and well engineered ascent in zigzag. No vegetation in the gorge.

miles

13¾ Narrow old bridge at a lower level than the present road. The older horse-road used to cross here from the S. bank to the N.

14¾ The **Kochak Dere** comes in on the N.

Road crosses to the N. bank by bridge (alt. 3,630 ft.). Some trees and grass here.

Yürük encampments may be seen in the valley.

Railway here runs to l. of road for a couple of miles, crossing and recrossing stream several times ; it then crosses road and runs on r. for about a mile, after which it remains on l. to Ulukyshla.

16¾ Old bridge to l. (alt. about 4,100 ft.). Here the earlier araba road, which used to ascend the hill from Chifte Khan, keeping some way S. of the gorge,crossed to the N. side of the river. The descent from the hill on the S. side is by a gigantic staircase of broad natural steps called **Giaur Sindikh.**

The valley now begins to open out, but is still very bare.

17¼ **Tossun Ali** (or Tossun Khan).

18¾ Mill on r. Valley now less rugged. The hills slope more gently and there are good meadows beside the stream. The main ridge of Taurus, the Bulghar Dagh, now comes into view.

19¾ **Cheshmeli Khan** ; village to r.

21¼ Ascent now fairly stiff.

22 A track branches to l. up the valley of the Zamanty Su to Eregli.

22¾ Khan ; strong spring.

Near here is a disused cemetery close to the road on r. Some of the tombstones are old Roman milestones. From the cemetery Porsuk village bears 331° and Bay Aghyl 320°.

23½ Road from the mines of Bulghar Maden to Nigde comes in on the l. over a spur lying between the main stream and the Zamanty Su.

miles	
25¼	**Kartal Hassan Khan** (? Bay Aghyl Khan). Valley narrows again.
25¾	Old araba road to Nigde branched here to N. through a gap in the hills.
26¼	Cemetery to r.; gardens to l.
27¾	Tumulus on l.
29¾	**Ulukyshla** village, which takes its name from the large building (the 'large barracks'), which stands in it; mosque to S. of the village; fair cultivation; carpet industry. Station (3rd class) on Baghdad railway ¼ mile to S. of village. Motor road runs to Nigde and Kaisari.
	The hills on either side now are low and rounded, with scattered juniper trees.
31¾	Stream. The road crosses a large valley which runs NW.
	Railway follows this valley.
	Gentle ascent.
35	About here road crosses a watershed, alt. 5,000 ft. Small cemetery near.
	Road traverses a small valley and ascends the **Birsene Dagh.** Summit about 4,900 ft. The descent is difficult in winter.
	The road descends a small valley with an excellent spring.
37	**Chayan Yaila** (Gaghshak), on a stream.
39	**Chayan** village (alt. 3,780 ft.), on a stream running NNW.
	The road runs WNW., crossing the Chayan stream and, shortly after, another flowing in the same direction.
45¼	Branch road with telegraph to **Chayany Bagh** village, 2 miles ENE.
47	Road crosses 2 streams flowing N. by W. between low spurs.
47½	Branch road NNE. to **Bulgurlu** village, 1¼ miles.

miles	
48	Wells on l. Road crosses irrigated plain, and some distance on crosses low spurs from mountain to SE.
50¾	Road crosses the railway S. of Bulgurlu station (alt. 3,434 ft.).
51½	Branch road NE. to Bulgurlu station, 1 mile. Road crosses and shortly after recrosses the railway. Spring on r.
54	**Hajilar Köprüsü,** stone bridge over the **Ivriz** stream which runs towards the N. (alt. 3,380 ft.).
56	**Eregli.** Railway station 1 mile SE.

GAZETTEER OF TOWNS

Adalia—Akseki—Alaya—Buldur—Egerdir—Elmaly—Eregli—Ermenek—Isbarta—Karaman—Kilindria—Levisi—Makri—Mut—Selefke.

ADALIA, P. and T., connected with Elmaly, Buldur, and Akseki or Alaya via Menavgat. Pop. 30,000; 23,480 Turks, 6,300 Greeks, 160 Jews, and 60 Armenians. The town is the chief place in the Adalia kaza of the Tekke sanjak of the vilayet of Konia. It is the seat of a civil court of first instance, a criminal court, a commercial and police court, and a religious tribunal presided over by the *naib* or *mufti*. Foreign interests are represented by British, French, Greek, Italian, and Persian vice-consulships or consular agencies.

General description.—Adalia is built on cliffs about 100 ft. above sea-level. The ground falls towards an open roadstead of horse-shoe form. There are two approaches from the sea, one by a grand flight of steps, said to be Venetian, which leads to a water-gate, the other by a remarkable cutting in the rock. The town proper is surrounded by a triple line of walls, the outer of which is flanked by towers and protected by a ditch. Inside the walls the houses rise closely one above another, and the streets are narrow.

The place is divided into quarters by walls which formerly separated, and still to some extent separate, the various communities. The Christians live mainly in the S. part, the Moslems in the N.

Outside the walls runs a good clean promenade, and well-watered gardens, among which stand the better-class houses, extend to the neighbouring foothills.

There are two bazars, one inside the walls near the shore, the other outside. The former is occupied by commercial offices and stores; the latter is the manufacturing quarter.

There are 7 insurance offices, 3 banks, 3 kahves, 3 hotels, 13 Turkish baths, 10 khans, and 2 hospitals.

The town possesses an Oriental Library, 62 mosques, 12 Greek Orthodox churches, 1 synagogue, and 1 Armenian church.

The Moslem population have 37 elementary schools, 1 girls' school, 1 intermediate, and 1 secondary school. For the Greek Orthodox inhabitants there are 6 elementary schools, 2 girls' schools, and 2 intermediate schools.

Supplies and Commerce.—The chief exports are cereals, flour, cattle, timber, sesame, wool, hides, valonia, liquorice, and soap-root. Imports include coffee, sugar, rice, pepper, cotton and cotton-goods, salt, glass and metal-ware, wines, henna, dried dates, and petroleum. The value of the exports is about three times that of the imports. Many kinds of vegetables and fruits are grown. There is also plenty of water, brought in aqueducts from the Düden Su, but no evidence as to its quality. Charcoal and firewood are obtainable.

Climate and Hygiene.—Spring and autumn are mild and pleasant. In December, January, and February there is a heavy rainfall, but the weather is seldom cold except when the wind is in the N. In the months of July and August the temperature sometimes reaches 100° or 102° F. The heat, however, is tempered by the sea-breezes.

During winter the neighbouring mountains are covered with snow, which feeds a large number of streams. Some of these pass through the town and keep the air moist throughout the year. As a result the climate is not very healthy. Endemic disorders are frequent, e. g. intermittent or remittent fevers, biliousness, dysentery and rheumatism. There are many cases of Arabian elephantiasis, especially among women.

History.—Adalia is the ancient Attalia, founded by Attalus II, King of Pergamum. It is said to have had a population of over 100,000. The town-walls date from the Byzantine period. They were strengthened by the Genoese, fell into disrepair for some centuries, and were restored over a century ago by Tekke Oghlu, a *dere-bey* who for some years maintained a revolt against Sultan Selim II.

Communications.—Roads run from Adalia to

1. Denizli (see Route 11).
2. Buldur (see Route 12).
3. Isbarta (see Route 13).
4. Egerdir (see Route 14).
5. Konia (see Routes 15 and 16).
6. Alaya or Selefke (see Route 17).

AKSEKI. P. and T. connected with Adalia and Alaya via Menavgat. Pop. about 1,500, almost entirely Moslem. The place is the head-quarters of the kaza of the same name in the Adalia sanjak of the Konia vilayet.

General description.—The town is built on a hill surrounded by lofty mountains. It possesses 20 mosques and 3 *tekkes*. One of the *tekkes* belongs to the Mevlevi Dervishes. There are also 30 *medresses*, 1 advanced school, 1 secondary, and 30 elementary schools.

Trade and Commerce.—The neighbourhood is rich in timber, which is floated down the Menavgat Chai. Tanning is carried on, the raw hides being mainly imported from Egypt.

Communications.—Routes run from Akseki to

1. Adalia (see Route 18).
2. Alaya (see Route 19).
3. Beyshehir and Konia (see Route 20).

A railway under Italian control has been projected between Sarylar and Akseki (see p. 47).

ALAYA, P. and T. O., connected with Akseki or Adalia via Menavgat. Pop. probably over 5,000, about one-third of whom are Greeks. Only Turkish is spoken. Alaya is the head-quarters of the kaza of the same name in the Tekke sanjak of the vilayet of Konia.

General description.—The town is a place of great natural strength, not unlike Gibraltar in situation. It is built on the E. side of a rocky promontory, on the W. and S. side of which are high cliffs. On the N. or land-side the ground falls abruptly to a low sandy isthmus separated from the mountains by a plain $\frac{3}{4}$ m. wide.

Along the harbour of Alaya is a sea-wall with large

towers at each end, in which are 5 vaults each 100 ft. long. Small boats are now built in the vaults. Above the sea-wall is a curved wall enclosing a space in which was the old bazar. Beyond this the houses are built one above another on a succession of ledges partly artificial. Higher up is a third wall, beyond it a few houses, a mosque and the ruins of a church, and above these a fourth wall. Between the latter and the cliff are three large cisterns for rain-water.

On the highest point (alt. 730 ft.) are the ruins of a small cruciform church. A fine view is obtained from the summit.

On the isthmus are the konak, a fine barracks, a small bazar and some good houses.

Altogether there are about 1,000 houses, over 600 of which are in the old town. The latter has narrow and winding streets. Outside it the modern houses are gradually extending to the S. into a plain covered with large fine orchards, gardens and vineyards. The shops and various offices are situated near the harbour.

There are 32 mosques, a few *turbes*, and 9 *medresses*. The Orthodox Greeks have 5 churches.

Among other buildings may be mentioned 1 Turkish bath and 3 khans.

The Moslems possess 10 elementary schools, the Orthodox Greeks 1 elementary boys' school and 1 elementary girls' school.

Supplies.—Cattle, vegetables and fruit may be obtained. The only drinking water is from cisterns.

Climate and Hygiene.—The climate is mild and healthy. The cold in winter is not excessive, and the summer heat is moderate.

Communications.—Routes run from Alaya to

1. Adalia (see Route 17).
2. Siristat (see Route 22).
3. Selefke (see Route 17).

BULDUR, P. and T. Telephone installations in the konak, barracks, police head-quarters, &c. Pop. 18,700; 14,000 Turks, 3,100 Greeks, and 1,600 Armenians. The town is the

chief place in the sanjak of the same name in the vilayet of Konia. There is an office of the Régie.

General description.—Buldur is built on a hill surrounded by large vineyards about 2 miles SE. of the brackish lake of the same name. It contains 24 mosques, 6 *tekkes*, 11 *medresses*, 1 Greek church, and 1 Armenian church. There are 6 Turkish baths, 5 khans, a hotel, 10 cafés, and many shops.

Supplies and Commerce.—Products include wheat, barley, beans, grapes, walnuts, opium, wool, carpets, hides, gum, and rose-water. There are 2 saw-mills, 1 flour-mill, and 12 water-mills. The chief industries are the tanning and dyeing of leather, and weaving and bleaching of linen.

Communications.—Within the area dealt with in this Handbook the main route from Buldur is that to Adalia (see Route 12). Roads also run to the Maeander valley and to Isbarta. The Ottoman Railway passes 15 miles from Buldur.

EGERDIR. P. and T. The place is the head-quarters of the kaza of the same name in the Hamid Abad sanjak of the vilayet of Konia.

General description.—The town is situated partly at the foot of the Davras Dagh, partly on a spit that projects into the Egerdir lake. It is the present terminus of the Ottoman railway. A single line of rails runs to the end of the spit, and a wooden pier has been constructed alongside for the lake traffic.

Communications.—Within the area dealt with in this Handbook the main route is that to Adalia. See Route 14.

ELMALY, P. and T., connected with Adalia; alt. 3,640 ft.; pop. 3,000–4,000, mainly Moslem, a considerable number of Greeks, some Armenians and a few Jews. The people have little Turkish blood.

Elmaly is the head-quarters of the Elmaly kaza in the Adalia sanjak of the vilayet of Konia.

General description.—The town lies in a recess of the hills which rise closely around it on every side except the SW. On this side there is a broad opening, filled with orchards and gardens, towards the lower plain (see p. 34 above).

The streets are narrow and steep. They are roughly paved with cobble-stones and quite unsuitable for wheeled vehicles. The place possesses 20 mosques (one of them large, with a fine court), 3 Greek churches, and 1 Armenian church.

Each district of the town has an elementary school. There are also 1 secondary school, 18 *medresses*, and a Greek Orthodox school. Among the other buildings are 5 Turkish baths and 3 khans. There are many shops.

Supplies and Commerce.—The district produces a large quantity of excellent wheat, barley, maize, and chick-peas, as well as many kinds of fruit. Water is abundant and good, and a copious stream from the hills runs through the town (see also p. 21 above). Firewood is brought from the hills which border the plain on the S. Agriculture is carried on chiefly by the Moslem population; commerce and crafts by the Christians.

Climate and Hygiene.—The climate is cool and generally healthy.

Communications.—Routes run from Elmaly:

1. To the Xanthus valley (see Routes 6 and 7).
2. To Adalia (see Route 9).
3. To Denizli (see Route 10).
4. To Fineka (see Route 8).

EREGLI, P. and T.; pop. 8,500; 7,200 Turks, Circassians, and Tatars, 750 Armenians, and 550 Greeks. The town is the head-quarters of the kaza of the same name in the merkez-sanjak and vilayet of Konia. It has offices of the Régie and Public Debt.

General description.—The place lies on the edge of the Konia plain at an altitude of about 3,460 ft. It is surrounded by orchards and gardens. It possesses 3 banks, 5 insurance offices, 2 khans, and a small German hotel. There are 20 mosques, 1 Armenian church, and 1 Greek church.

Supplies and Commerce.—The town has recently risen in importance owing to its position on the Baghdad Railway. The bazar is large and much frequented. Fruit is plentiful in season. Exports include cereals, chick-peas, carpets, wool,

and gum tragacanth. The chief imports are coffee, sugar, petroleum, and iron goods. There is an active trade with the interior.

Hygiene.—The district is unhealthy, owing to the neighbouring swamps.

Communications.—Within the area dealt with in the present volume routes run from Eregli to

1. Karaman (see Route 38).
2. Maghara (see Route 39).
3. Mersina, over the Dümbelek Dagh (see vol. iv, part 2).
4. Bozanti Khan (see Route 40).

ERMENEK, P. and T., connected with Mut; pop. over 6,000. The place is the head-quarters of the kaza of the same name in the Ichili sanjak of the Adana vilayet.

(Ichili was reported in 1917 to be an independent sanjak.)

General description.—Ermenek lies at a height of about 4,450 ft. It contains about 1,200 houses, built on steps and terraces above a deep valley some 2 miles broad, through which runs the southern branch of the Gök Su. It is the ancient Germanicopolis, formerly the capital of Cilicia Tracheia and a noted pirate-stronghold. There are still to be seen remains of the ancient fortifications, and many of the neighbouring precipices are honeycombed with chambers which served as a retreat for the inhabitants. Modern buildings include 11 mosques, 6 *medresses*, 1 *tekke*, 1 Turkish bath, and 2 khans. There are 12 mills on the Gök Su near Ermenek.

Supplies and Commerce.—The Ermenek plain, below the town, is well cultivated and wooded. Grain, butter, cheese, grapes, apples, and pomegranates are easily obtainable and cheap. Weaving, shoemaking, and tailoring are carried on, and in 1913 the place looked prosperous.

Communications.—Routes run from Ermenek to

1. Selinti (see Route 24).
2. Karaman (see Route 35).
3. Mut (see Routes 28 and 29).
4. Siristat (see Route 23).
5. Kilindria (see Route 25).

ISBARTA, P. and T.; pop. over 20,000. There is a considerable floating population during six months of the year, composed mainly of Greek traders. The town is the administrative centre of the sanjak of Hamid Abad in the vilayet of Konia.

General description.—The place is beautifully situated in a fertile plain at the foot of the Aghlasun Dagh and on the banks of a tributary of the Ak Su. Nearly every house has a garden, and round the town are fine plantations. The streets are narrow and not very well kept.

Outside the town is a large mosque with a dome which was formerly gilt, and there are about thirty other mosques.

In 1914 it was reported that the town had been badly damaged by an earthquake.

Supplies and Commerce.—The sanjak of Hamid Abad produces wheat of excellent quality. Opium is successfully cultivated, and there is a considerable trade in grapes and wine.

Communications.—Within the area dealt with in the present Handbook the main route from Isbarta is that to Adalia (see Route 13).

Routes also run to Buldur, Dineir, and Egerdir (see vols. ii and iii).

KARAMAN, P. and T.; pop. 5,000; 4,500 Turks and 500 Greeks. The town is the centre of the kaza of the same name in the merkez-sanjak and vilayet of Konia. The headquarters of the Régie for a large district is fixed here.

General description.—The town lies on the edge of the Lycaonian plain, and occupies the site of the ancient Laranda, of which nothing now remains except the name, still used by the Christian population. There are considerable mediaeval ruins, notably those of a castle to W., 2 fine mosques, 1 at the S. and the other at the W. end of the town, and a beautiful *medresse* S. of the main street and just W. of the bazar. There are 2 khans, of which that situated opposite the konak is said to be the better.

Supplies and Commerce.—A good deal of agriculture and cattle-breeding is carried on, and the bazar is said to be good. The only local manufactures are coarse cotton and woollen

goods. Hides, wool, and valonia are sent to the Smyrna district. Experiments have been made recently in the production of sugar-beet round Sidivre to NE. of Karaman.

Hygiene.—The place is said to be subject to fever.

Communications.—Within the area treated in the present Handbook routes run from Karaman to

1. Siristat (see Route 34).
2. Ermenek (see Route 35).
3. Mut and Selefke (see Route 36).
4. Maghara and Lamas (see Routes 37, 30 and 33).
5. Mersina, over the Dümbelek Dagh (see vol. iii).

Karaman is a station on the Baghdad Railway.

KILINDRIA, P. and T., connected with Anamur or Selefke. The population was given in 1892 as 210, the majority being Greek emigrants from Cyprus and Alaya (but see below). The village is the head-quarters of the Gulnar kaza in the Ichili sanjak of the Adana vilayet. It possesses offices of the Forestry Department, Public Debt, Régie, and Customs, and is the seat of a court of first instance.

General description.—The place stands on the site of the ancient Kelenderis, of which little is left but numerous tombs and a beautiful little Corinthian monument at the entrance to the town. On the small promontory which protects the harbour are the konak and mediaeval ruins. The present town possesses 1 mosque, 1 *tekke*, an Orthodox church, 1 *medresse*, and 2 schools.

Supplies and Commerce.—Timber and firewood are exported, as well as gall-nuts, butter, cheese, wool, and undressed hides. Trade has greatly developed since the British occupation of Cyprus, which takes most of the exports, and the population is probably now considerably in excess of the figure given above. There are practically no imports.

Communications.—Routes run from Kilindria to

1. Alaya (see Route 17).
2. Selefke (see Route 17).
3. Ermenek (see Route 25).
4. Mut (see Route 26).

LEVISI (or **KAYA**). Pop. over 3,000, mainly Greeks.

General description.—The town lies on the SE. edge of a well-cultivated plain (see p. 51) at a distance of 4–5 miles SW. of Makri, some of whose inhabitants resort to it in summer. It is composed of about 500 houses, mostly of two stories.

The place looks clean and prosperous. There are many gardens and some fine houses in the plain, which is fertile but marshy and unhealthy in summer. The inhabitants are said to be progressive. Many of them send their children to Smyrna, Constantinople, Paris, Montpellier, or Aix to be educated.

Commerce.—There is a considerable trade in carpets, which are made in a fashion similar to those of Smyrna but are less fine in the pattern.

MAKRI, P. and T. The T. is connected with Smyrna via Mughla. On the E. it runs to the terminus of Kalamaki on the coast. Pop. about 1,500, about equally divided between Greeks and Turks, with a few Spanish Jews.

The place is the head-quarters of the kaza of the same name which lies in the SE. corner of the Menteshe sanjak of the vilayet of Smyrna. It is also the residence of British, French, and Greek vice-consuls or consular agents, and possesses shipping- and customs-offices and a sub-agency of the Régie.

General description.—The town itself is merely a collection of about 400 huts situated at the SE. end of the Gulf of Makri in the middle of a marsh. It possesses 2 Turkish and 5 Greek elementary schools, and 1 Greek secondary school, as well as 2 mosques with minarets, a Greek Orthodox church, and a Greek chapel. There are a small bazar, about 50 shops, 20 stores, 4 kahves, 1 khan, 3 fountains, and 1 public bath.

In front of the modern town is the scala or landing-place; round it are the ruins of the ancient Telmessus, and behind is a considerable plain which is, however, not cultivated far inland.

Supplies and Commerce.—During autumn and winter cattle,

sheep, poultry, and bread may be obtained here, and the harbour teems with fish. Charcoal is an article of export. Water is plentiful during winter, and an abundant supply may be had from any of the ravines on the W. side of the harbour. There are also several springs of good water behind the town, but the clear water which issues in great abundance from the rocks near the ancient theatre is said to be very unwholesome. In summer water can only be procured in small quantities from a spring close to the shore of a small bay opposite the S. end of Cavaliere Island which protects the entrance to the Gulf of Makri.

The builders, wood-cutters and smiths of Makri are valued as capable workers in a wide district round about. The chief exports are wheat, barley, maize, millet, sesame seed, valonia, charcoal, building-timber, and chrome-ore. In the year 1899–1900 the value of exports was £2,200,000, that of imports £1,800,000.

Climate and Hygiene.—The place is habitable only in autumn and winter. In summer it is quite deserted, the inhabitants migrating to Rhodes or Levisi (Kaya) to escape the fever caused by the marshes.

Communications.—Roads run from Makri

1. NW. to Mughla (see vol. ii).
2. E. to the Xanthus valley (see Route 2).
3. To Levisi (Kaya) (see Route 1).

None of these roads is metalled.

MUT, P. and T., connected with Karaman or Selefke. Pop. variously given as under 1,000 and about 4,000. The place is the head-quarters of the kaza of Mut in the Ichili sanjak of the vilayet of Adana. It possesses an office of the Régie.

General description.—The village lies something over 1,000 ft. above sea-level. It occupies part of the site of the ancient Claudiopolis, founded as a colony in A. D. 41. Fragments of ancient buildings have been used in constructing the modern village. The tomb of Karaman Oghlou is to be seen here, and a neighbouring height is crowned by a mediaeval castle.

The chief importance of Mut lies in its position on the road

between Karaman and Selefke. It possesses a bad bazar, 2 khans, and an indifferent kahve. There are also 1 mosque, 6 schools, and 1 *medresse*.

Supplies.—Supplies are scanty, being barely sufficient to support the local population. There is a considerable amount of vine-culture, but practically no trade. Water is abundant. The chief supply apparently comes from a clear cool spring which rises beneath the castle. Fodder is plentiful from June to October.

The place has a reputation for mosquitoes in summer.

Communications.—Routes run from Mut to

1. Ermenek (see Routes 28 and 29).
2. Karaman (see Route 36).
3. Maghara (see Route 30).
4. Selefke (see Routes 29 and 36).

SELEFKE, P. and T., connected with Kilindria and Anamur, Mut and Karaman, and Mersina. Pop. about 2,500; 1,400 Moslems, 800 Orthodox Greeks, and 250 Armenians. Selefke is the head-quarters of the Ichili sanjak in the vilayet of Adana. It is the seat of offices of the Forestry Department, Excise, Public Debt, and Régie. Besides the mutessarif and other civil officials there is a military governor.

General description.—The town stands on the r. bank of the Gök Su at the NW. corner of the plain of Selefke (see p. 34). The houses generally are poor, the chief exception being the konak, situated on the bank of the river. Other buildings include 1 mosque (dating from the Arab domination), 2 *tekkes*, a Greek church, an Armenian chapel, and a Turkish school. There is a fine khan.

The bridge which crosses the Gök Su is of stone, with six arches, and is a restoration of that built in Roman times.

On the summit of the hill which dominates the town is a mediaeval castle, and on the slopes are numerous ancient remains, including those of a theatre, porticoes, canals, a rock-cut cistern, and an aqueduct.

Supplies and Commerce.—Supplies are scanty, though the plain could be extensively cultivated. There is good coarse

grazing in places. Commerce is of little importance. Local industry is practically confined to the manufacture of woollen and goat-skin carpets.

Communications.—Routes run from Selefke to

1. Kilindria, Alaya, and Adalia (see Route 17).
2. Mut and Karaman (see Routes 29 and 36).
3. Mersina (see Route 31).

INDEX

[Figures in heavy type indicate the page on which description of a town will be found.]

A

Abajyj Cheshme spring, 131
Acherli Bazar, 97, 98
Adada ruins, 85
Ada Köi, 89
Adalia, 11, 15, 23, 24, 33, 44, 48, 62, 67, 72, 75–8, 80, 83, 85, 91, 92, 97, **139–41**
Adana, 49
Ada Tepe Chiftlik, 132
Adrass Dagh, 108
Afuz Pasha, 75
Aghlasun, 76–8
Aghlasun Chai, 24, 78
Aghlasun Dagh, 77
Aghlasun plains, 78
Aghyz, 132
Aidin, 49
Aidle, 59
Aidost Bel, 47
Aijilar, 123
Aine Bazar, 106, 107
Airanjy Chiftlik, 132
Ai Vasil Chiftlik, 64
Ajy Padem, 49
Ak Chai, 20, 63
Akche Göl Gedir, 114
Akche Punar, 98
Ak Dagh, 15, 61, 64
Ak Kale, 118
Akkaya stream, 105
Ak Köprü (*on* Chakyt Su), 134
Ak Köprü (*on* Gök Su), 99, 103
Ak Köprü (*on* Gövden Chai), 116
Ak Köprü (*on* Karynjar Chai), 19
Ak Liman, 96
Aksas, 95
Akseki, 45, 47, 49, 89, 97, **141**
Akshehir, 49, 86, 87
Ak Su (*ancient* Cestrus), 23, 83, 92
Ak Su (tributary of the Dalaman Chai), 18
Ak Su (tributary of the Gök Su), 28
Ak Su (tributary of the Köprü Su), 24, 25
Ak Su (tributary of the Menavgat Chai), 27
Aktary Chai: *see* Gök Su
Akyaka, 52
Ak Yokush, 87
Alaghyr Chai, 21, 22, 62
Alaghyr Valley, 16
Ala Khan monastery, 127
Ala Khan ruins, 127
Alaklissia, 126
Alara: *see* Allar
Alara Su, 93
Alata Chai, 117, 119
Alata Su, 27, 103
Alaya, 44, 47–9, 93, 94, 97, 98, 102, **141–2**
Alaya Plain, 98
Aleppo, 49
Alexander the Great, 41
Ali Bey Dagh, 123
Ali Fakhr-ed-din Yaila, 70
Ali Hoja, 135
Allar, 93
Al Su, 119
Alty Kapu, 87
Ambar Arasy, 131
Anai, 107
Anamas Dagh, 84
Anamur, 49
Anamur, Cape, 14
Anamur Kalesi: *see* Mamurje Kale
Anatolian Railway, 43
Antiocheia ad Cragum ruins, 94
Arablar, 93
Arbaj Su, 119
Arghan, 93
Armenians, 34, 42
Armudly, 64
Arslan Yaila, 62
Aruf, 61
Arycandus R.: *see* Bashkoz Chai
Assaralty, 20
Assar Kalesi, 37, 123
Assar Köi, 79
Atalan, 76
Avdan Dagh, 13
Avlan, 52
Avlan Göl, 65
Avlan Kahve, 65
Avshar, 88
Ayash, 68
Ayash ruins, 118

B

Baba Dagh, 17
Bademli, 89
Baghdad Railway, 46, 134
Baghyrsak Dere, 67
Bahardurlu Su, 106
Baidamajy, 75
Bakluzan Deresi: *see* Bashlykan Deresi

Balabolu, 109
Baladiz, 47
Balamut, 55
Balandyz, 126, 129
Banks, 43
Barley, 34
Barsak Yailasy, 70
Bashara Su, 87
Bash Deirmen mill, 77
Bash Dere, 28, 104
Bashköi, 103
Bashkoz, 65
Bashkoz Chai, 16, 21, 60, 61, 65
Bashkyshla, 122
Bashlar, 90
Bashlykan Deresi, 124
Baulo, 85
Baulo Dere, 85
Bay Aghyl, 136
Bay Aghyl Khan: *see* Kartal Hassan Khan
Bayat, 86, 88
Bayndyr (nr. Elmaly), 66
Bayndyr (nr. Sügüt Göl), 69
Bazarjyk, 27, 91, 93: *see also* Menavgat
Bazarjy Kalesi: *see* Selinti
Bazyrghyan Köi, 56
Bech, 66
Beden, 98, 101
Beder Bey, 68
Beji, 108
Beji Su, 108
Belen Yaila, 61
Bereket Dagh, 62
Betlam: *see* Betnam
Betnam, 104
Bey Dagh, 15
Bey Köi, 17
Beyshehir, 45, 49, 83, 84, 86, 88, 97, 98
Beyshehir Chai, 97
Beyshehir, L., 15, 88
Bidiköi, 95
Birene, 114
Birsene Dagh, 137
Boghaly Chai, 25
Boghaz Burun, 71, 74
Boghaz Su, 30, 80, 81
Bostan, 95
Bostan Özu: *see* Bostan Su
Bostan Su, 37, 124
Boyajyk: *see* Duajyk
Boyalar, 123
Bozanti, 11, 46
Bozanti Khan, 46, 134
Bozburun Mt., 24
Bozkyr Maden, 37
Bozuk Khan, 127
Buba Dagh, 54
Bujak Chai, 124
Bujak Dagh, 124
Bujak Kyshla, 124
Bujak Plain, 78
Bulasan, 25
Buldur, 12, 15, 23, 45, 49, 72, 78, 142–3
Buldur Göl, 17, 18
Bulghar Dagh, 11–13, 30
Bulghar Maden, 47, 135, 136
Bulgurlu, 134, 137
Bulgurlu station, 138
Bulumia, 84
Bunak, 73
Bunarbashy, 57
Burj Kalesi, 59
Buzakche Chai: *see* Gök Su
Byjykjy Chai, 105
Byzantine basilica, 60

C

Calycadnus R.: *see* Gök Su
Capo Cavaliere, 96
Casteloryzo harbour, 48
Central plateau, 15
Cestrus R.: *see* Ak Su
Chakyt Su, 134
Chaladran Plain, 94
Chal Dagh (nr. Adrass Dagh), 109
Chal Dagh (nr. Pirlevgunda), 103
Chalyja, 110
Chaman Valley, 60
Cham Hally R., 74
Cham Köi, 68
Chandyr (nr. Adalia), 62
Chandyr (nr. Bayat), 86, 88: *see also* Shandur
Chandyr (in Pambuk Ova), 82
Chandyr Chai (tributary of the Ak Su), 24, 62
Chandyr Chai (tributary of the Dalaman Chai), 18
Charkysh, 91
Charshembe Gorge, 45
Charvak, 76
Chatak, 115
Chaush Köi, 37, 93
Chayan, 134, 137
Chayan stream, 137
Chayan Yaila, 137
Chayany Bagh, 137
Chayrbagh, 84
Cheltikje, 73
Chengir, 93
Cheshmeli Khan, 136
Chetme, 89
Chibuk Boghaz, 74
Chichikler, 84
Chick-peas, 34
Chiek, 73
Chifte Khan, 134–6
Chivi Su, 28
Choban Issa, 69, 70
Chok Ören, 117
Cholla Kapusu, 28
Chöpelde Belenje, 25
Chorak, 95
Chorum, 70
Christians, 42
Chrome-ore, 31
Chukur, 116
Chukura Su, 87, 88
Chukurbagh (nr. Ermenik), 105
Chukurbagh (nr. Kash Kassaba), 57
Chukurbagh (nr. Mut), 116
Chukur Injere, 53
Chukur Köi, 68
Chykyn Ova, 75
Cibyra ruins, 69
Cilician Gates, 10, 11, 36, 47, 134
Cilician Plain, 10
Cilicia Tracheia Mts., 44, 46

Climate, 36, 37
Coast, 35, 36
Communications, 43–7
Coriander, 31
Coropissus, 125
Corycian Cave, 121
Corycus: *see* Korgos
Cremna ruins, 80
Crete, 10
Cross Pass: *see* Hach Bel

D

Da Bazar, 125
Dalaman Chai, 11, 17–19, 39, 68
Dalaman Chai Valley, 30, 31
Dalba Köi, 61
Damalan, 94
Damlama Jenini, 113
Davas Chiftlik, 70
Davas Ovasy, 68
Davras Mts., 15
Dede, 115
Dedem Köi, 98, 99, 103
Deirmen Chai, 25
Deirmenjik Boghazy, 114
Deirmenlik Gorge, 109
Deje Chai: *see* Teje Chai
Deli Su: *see* Sheitan Dere
Dembre, 58
Dembre Chai, 20, 21, 58
Dembre Plateau, 16
Dembre Valley, 16, 30, 32, 60
Demirji Köi, 21
Demir Kapu, 91
Denizli, 12, 17, 23, 44, 67, 69
Dere Aghzy, 58, 60
Dereboghaz, 52
Dereköi (nr. Elmaly), 66
Dereköi (nr. Kara Oyuk Bazar), 70
Dere Köi (nr. Aghlasun), 78
Dere Köi (nr. Beyshehir), 86, 89, 97
Dere Köi (*on the* Istanoz Chai), 23
Dere Mahallesi, 77
Derenderes Chai, 95
Devil's Valley: *see* Sheitan Dere
Diep: *see* Dip
Dilevli, 37, 70
Dim Chai, 94
Dindebol, 103
Dineir, 43
Dip, 54
Dipdavras Ridge: *see* Dipoiras Ridge
Dipoiras Ridge, 11, 15
Divle (nr. Eregli), 133
Divle (nr. Kekova), 60
Divle Su, 12, 131
Dobadyr Su, 96
Dodurga, 70
Dont, 52, 55
Dorla, 110
Duajyk, 132
Düdens, 30
Düden Su, 32, 75, 83: *see also* Katarraktes R.
Dümbelek Bel, 13
Dümbelek Dagh, 12, 46
Durbanas, 98, 102
Düver, 54, 55
Düver Yaila, 63

E

Earth Bridge: *see* Yer Köprü
Ebejik, 37
Edebessos ruins, 62
Egerdir, 12, 15, 43, 45, 47–9, 80, 81, 143
Eldivan, 98
Eleribas, 106
Elmaly, 36, 43, 44, 47–9, 63–7, 69–71, 143–4
Elmaly plateau, 15, 16, 31, 34
Enif Ova, 90
Erdemli, 119
Eregli, 12, 46, 48, 131, 133, 136, 138, 144–5
Ermenek, 14, 28, 46, 48, 49, 102, 104, 106, 107, 109, 110, 123, 124, 129, 145
Ernez Chai, 21, 58, 60
Erymna, 26
Eski Güdümen, 132
Eskihissar, 63
Euphrates R., 9
Eurymedon, 85: *see also* Köprü Su
Eyiler Köprü, 82, 85

F

Fassiler, 84
Fauna, 39, 40
Fellen Chai, 58, 60
Feriske, 104, 105
Fet, 105
Fineka, 44, 49, 65
Fineka Bay, 16
Firsün, 97
Forty Arches: *see* Kyrk Göz
Fughla, 47, 73
Fughla Valley, 15
Furnaz, 56, 58
Fyndyk Punar Chai, 120
Fysandun, 125

G

Gaelin Cheshme, 129
Gaghshak: *see* Chayan Yaila
Gargara, 102
Gebren, 60
Gebren Chai, 17, 18, 22
Gechiler, 51
Gedikbashy, 105
Gelemish, 49, 56
Gend Chai: *see* Ghöt Chai
Gendova, 58
Genoese, 41
Geology, 17
Gereniz Chai, 18, 68
Gerez, 103
Gerisburnu Chai, 20, 64
Gheyik Dagh, 15, 100
Ghöt Chai, 70
Giaur Sindikh, 136
Gijik, 94
Gilendi, 124
Gilibel Dagh, 124

Gilindere Chai, 119
Girme, 78, 80
Göben Dagh, 16
Göderet Chai, 104, 105
Gödet, 130
Göidere, 82
Göidere Chai, 82
Gök Belen, 107, 126, 129
Gökdere, 122
Gök Punar spring, 82
Gökpunar Su: *see* Baghyrsak Dere
Gök Su, 13, 14, 27–30, 99, 103, 117, 127, 128
Gök Tepe, 105
Gölbashy, 58, 60
Gölhissar, 69
Gölhissar Lake, 18, 69
Gölhissar Ovasy, 69
Göljik, 113
Gövden Chai, 116
Göverjinlik, 92
Göyerek, 121
Gozlu Dagh, 104, 109
Grauvga, 127
Greeks, 34, 42
Gülik Dagh, 71
Gulnar, 49
Günde, 104
Gündere, 122
Gündere Su, 122
Gündüghün, 98
Güne, 94
Günei, 106
Günei Dagh, 105
Günük, 51, 53–6
Gurdef Dagh, 15
Gürlek, 19
Gürlek Chai, 19
Gurma, 62
Gurma Dagh, 62
Gurva, 104
Gyöben, 52
Gyömbe, 64

H

Hach Bel, 94
Hafiz Pasha: *see* Afuz Pasha
Haidle: *see* Aidle
Haji Ahmetli, 116
Haji Baba Dagh, 122, 123
Hajilar Köprüsü, 138
Hajiler: *see* Aijilar
Haji Omar: *see* Torumlar
Haj Punar gorge, 130
Haklyk: *see* Zimri Dagh
Hamza Yaila, 37, 133
Harbours, 48
Hassan Aliler, 120
Hassan Pasha, 22
Hassan Pasha Chai, 22
Hassan Pasha Köi, 70
Hierapolis: *see* Coropissus
Hoiran, 60
Hüdede, 117
Hüdede Tepesi, 117
Hüyük Burnu, 132

I

Ibrade, 90
Ibrala Su, 12
Icherishehir, 88
Ilamos, 104
Ilghin, 88
Ilija spring, 126, 127
Ilije, 91
Ilije Hammam, 135
Ilijera, 93
Illa, 69, 70
Imejik, 66
Indian corn, 31
Indus R., 68
Industry, 43
Inerji, 103
Injarkara Su, 94
Injir Bazar Khan, 78
Injirli Kahve, 71
Inlije, 84
Ipderesi, 103
Iron Gate: *see* Demir Kapu
Isauria, 46
Isbarta, 12, 23, 43, 45, 48, 49, 76, 77, 146
Isbarta Chai, 23
Isindipi, 59
Iskander, 88
Iskelaz, 88, 89
Islam, 43
Islamlar: *see* Potamia
Ismail Khoja, 93
Istanoz, 23, 70
Istanoz Chai, 17, 22, 23, 70, 71
Ivriz Dagh, 13
Ivriz stream, 138
Ivzit, 102

Jejek, 94
Jen Hassan Chiftlik, 131, 132
Jews, 34, 42
Jidem Dagh, 105
Jire, 81

K

Kaba Aghach, 52
Kadyköi, 37, 110
Kailuka, 73
Kainar Punar, 117
Kaisari, 134, 137
Kalabakly, 110
Kalamaki, 56
Kalamaki Bay, 16
Kaleköi, 131
Kaltyla, 116
Kampos Plain, 86, 89
Kamyshly Boghaz, 134
Kanidivan, 118
Kanytelis: *see* Kanidivan
Kapakly, 59
Kapak Su, 129
Kapu gorge, 31
Kara Aghach, 131
Kara Baiil, 76
Kara Baulo Yaila, 85
Kara Ba'yr: *see* Kara Baiil
Karabujak, 90
Karabunar Dagh, 13
Karaburun, 93
Kara Chai, 60
Karadagh, 37, 60
Kara Dagh, 131
Karadiken (nr. Beyshehir), 89
Karadiken (nr. Mut), 125, 128

Karaja Aghach, 91
Kara Kaya Dagh, 70
Karaköi, 53
Kara Kuyu Dagh, 13
Karamak, 73
Karaman, 12, 28, 43, 45–9, 107, 122–6, 129–33, **146–7**
Karamandalar, 91
Karamania, 35
Karamanly, 22
Karanfyl Chai, 19
Kara Öyük Bazar, 68, 69
Kara Öyük Bazar Plain, 67
Karasekiz: *see* Karjasekmez Pass
Kara Su (tributary of the Gök Su), 28
Kara Su (tributary of the Köprü Su), 24
Kara Su (nr. Alata Chai), 119
Kara Su spring, 135
Karatash Yaila, 130
Karghyl Khan, 91
Karjasekmez Pass, 127
Karmaja Dagh, 63
Karpuz Su, 93
Kartal Hassan Khan, 137
Kashakly, 84, 89
Kash Kassaba, 32, 57, 58
Kash Koi, 37, 111, 129
Kashyler, 91
Kasteloryzo harbour, 35
Kasymlar, 85
Katarraktes R., 92: *see also* Düden Su
Katenna, 26
Kavak, 114
Kavakly, 120
Kaya: *see* Levisi
Kazanes R., 18
Kaz Chiftlik, 47
Kazyk Bel, 17, 18, 68
Kebenek, 111, 129
Kebes Kahve, 72
Keklije Kahve, 67, 69, 71
Kekova, 59
Kekova harbour, 35
Kemranly, 37, 123
Kesme, 25, 85
Kesme Yaila, 85
Kessik Bel Dibi spring, 91
Kessik Bel Pass, 83, 91
Kestel (*on* Kestel Göl), 73
Kestel (nr. Pirinj Su), 125, 126
Kestel Dagh, 94
Kestel Göl, 23, 73
Kestel ruins, 94
Kestel Su: *see* Pirinj Su
Kestep, 52
Kesteshek, 62
Khadem, 103
Khatyn Serai, 45
Khelidonia Capè, 11, 15, 16
Khoja, 86
Khoja Assar, 82
Khoja Kalesi: *see* Ala Khan monastery
Khoja Su, 82, 85
Khoja Valley, 47
Khonas Dagh, 17
Khorzum, 18, 68, 69
Khorzum Chai, 18
Kia-mally, 73: *see also* Kyakhmally
Kilindria, 48, 96, 106, **147**
Killepe, 61
Kirili, 88
Kirlün Boghaz, 37
Köch, 88
Kochak Dere, 136
Koch Oghlan, 54, 55
Ködörlö, 52
Koghade Göl, 81, 82
Köibaghche: *see* Köibashy
Köibashy, 58
Koja Chai, 19, 20
Kojiolan: *see* Koch Oghlan
Konia, 11, 12, 15, 43–5, 47, 49, 83, 84, 86, 87, 92, 122
Konia Plain, 88, 98
Köprü Su, 24–6, 30, 32, 91, 92
Korash, 130, 133
Korgos, 118
Korou Deresi, 109
Körüstanbelen, 104
Kozaghach, 62
Kozlu Bujak, 126
Krögaz, 72
Küchük Chai, 24, 82
Kuljaly, 114
Kum Avshar, 68, 70
Kum Kapu, 96
Kürd Köi, 107
Kürje Köi, 62
Kurtly Chai, 25
Kurtuma, 132
Kuru Dere (nr. Karaman), 123
Kuru Dere (nr. Selefke), 117
Küshmüshar, 63
Kuyulu Bel, 63
Kuyungu: *see* Tekir
Kyakhmaly, 78
Kyrk Bunar Dagh, 15
Kyrk Gechit Pass, 82
Kyrk Göz, 75
Kyshla, 63
Kyshladagh, 56
Kyshlar, 103
Kyz Kale, 118
Kyzlarpunar spring, 95
Kyzly Hissar, 135
Kyzyl Assar plateau, 105
Kyzylbagh, 118
Kyzyl Bujak, 73
Kyzyl Burun, 76
Kyzyl Cheshme, 131
Kyzyl Gechit, 30, 122
Kyzyl Hissar, 68
Kyzyl Kaya, 47, 71
Kyzylkaya Pass, 72, 75
Kyzyl Liman, 37
Kyzyl Liman Burnu, 95
Kyzyl Mezeli, 113
Kyzyl Ören, 86, 87
Kyzyl Tepe, 12
Kyzyl Yahya, 122

L

Lamas, 46, 120, 121
Lamas Khan, 117, 119
Lamas Su, 13, 29, 30

Lavdha, 103
Levantines, 42
Levisi, 51, **148**
Levisi Plain, 51
Limestone, 17, 34
Low Taurus, 13
Loyka, 90
Lycia, 10, 15, 16
Lycian coast, 35
Lycian promontory, 44
Lycians, 40
Lysis: *see* Gebren Chai

M

Maeander Valley, 11, 44, 45
Maghara, 30, 46, 112–14, 116, 120–2, 129, 130, 131, 133
Maghara Chai, 116
Mahc Chai, 105
Mai, 45
Maize, 34
Makri, 35, 36, 44, 47–9, 51–5, 64, **148–9**
Makri Plain, 64
Malek Kalesi, 82
Maltepe Su: *see* Sheitan Dere
Mamak Ova, 76, 77
Mamurjy Kale, 95
Manai, 70
Manamas Köprü, 104
Mangyr Chai, 20, 55
Margarvyk, 74
Maruf Chai, 105
Mashted, 122
Massikytos: *see* Ak Dagh
Mehre, 98
Meidan, 113
Meirangoly, 89
Melanus: *see* Dobadyr Su
Melikli, 132
Melis Dagh, 14
Meliss Tepe: *see* Kemranly
Menavgat, 49, 93: *see also* Bazarjyk
Menavgat Chai, 26, 27, 32, 93
Mendes Dagh, 52–5
Meram, 84, 86, 87
Meremli, 96
Mersendi Chai, 113, 117
Mersina, 49, 117, 120, 121
Mesabosulu Dagh, 13
Metik Dagh, 90
Meyil Dagh, 130
Mezetli, 120
Mezetli Chai, 120
Millijöy stream, 88
Minara, 51–4
Monastir Karyesi, 51
Moslems, 34, 42
Mountains, 12–17
Mufti Mahallesi, 120
Mughla, communications, 44, 47, 49
Mürre, 66
Müshirdim Kuyu spring, 130
Mut, 46, 49, 106, 107, 110, 112, 115, 116, 127, **149–50**
Mut Baghcheler: *see* Mut Ören
Mutessaryfyn Chiftlik, 119
Mut Ören, 107
Mut Valley, 128

N

Narly, 115
Narly Su, 115
Nassyf, 60
Nava Chai: *see* Bash Dere
Navahy Su, 28
Negroes, 42
Nigde, 135–7

O

Ören, 44, 64
Örendagh, 56
Örenköi, 114, 121, 122
Orta Chai: *see* Bashkoz Chai
Ortaköi, 95
Orta Köi, 57
Ottoman Railway, 43, 47
Ovajyk (nr. Makri), 53
Ovajyk (nr. Selefke), 96
Ovajyk Dagh, 15
Öyük, 70
Öz Köi, 58

P

Padem Aghach: *see* Baidamajy
Pambukly, 115
Pambukly district, 112
Pambuk Ovasy, 24
Pamphylia, 11, 15
Pamphylian coast, 35
Pamphylian Plain, 10, 31–4, 44
Patara ruins, 56
Pelengi, 51
Perchin Bel, 133
Perchin Dagh, 13
Perchin Yaila, 37, 133
Perge, 33
Pershendi Chai: *see* Mersendi Chai
Pirinj Su, 28, 125, 128
Pirlevgunda, 98, 103
Pirnaz, 19
Pirnaz Chai, 18
Pisidian Mts., 11
Plains, 30–4
Platanistus ruins, 95
Pompeiopolis ruins, 120
Population, 40–2
Porsuk, 136
Porto Cavaliere Bay, 96
Potamia, 58
Punar Bazar, 81

R

Rahat Dagh, 16, 18, 69, 70
Railways, 47
Rhodes Is., 10
Rivers, 17–30
Roads, 43–7
Rough Cilicia, 10, 11
Rough Cilician coast, 35

S

Sagalassus ruins, 77
Sai Deirmen, 113
Sai Deirmeni, 114
Said Pasha's chaussée, 46, 113
Salamut Boghaz, 70
Samun, 66
Sandstone, 17
Sanjakly, 52
Sarykavak, 112, 115
Sary Kavak, 101
Sarykavak Chai, 29, 111
Saryköi, 88
Sarylar, 47, 93, 97
Sary Oghlan, 37, 122, 123
Sary Su, 88
Sazak (nr. Girme), 78
Sazak (on the coast), 94
Sedek Yaila, 57
Seidishehir, 37, 88
Selefke, 46, 48, 49, 92, 96, 106, 107, 110–12, 117, 121, 125, 126, 129, 133, **150–1**
Selefke Plain, 31, 34
Selinti, 94, 104, 106
Selli Bel, 106
Serai, 97, 98
Serpek: *see* Ambar Arasy
Sevasty Güsle, 105
Sevasty Kyshla: *see* Sevasty Güsle
Sevasty Yaila, 105
Seyidler, 64
Seyidler Chai: *see* Koja Chai
Seyidler Yailasi, 63
Shale, 17
Shandur, 88: *see also* Chandyr (nr. Bayat)
Sheitan Dere, 113, 118
Sheker Punar spring, 134
Sibila: *see* Coropissus
Sidivre, 131, 132
Sidre Chai, 94
Sidrova, 46
Siji Chai: *see* Sokhta Chai
Sina Chai, 105
Sinekji, 127
Sipman spring, 51
Siristat, 45, 49, 97–9, 102, 103, 122, 123
Sirlekler, 70
Sivri Dagh, 62
Sobujaor Ilzunly, 90
Sokhta Chai, 95
Sokhta Kalesi, 95
Sorvuk Su: *see* Tatly Su
Sowuk Su, 96
Sudaklar: *see* Sirlekler
Sügüt, 69
Sügüt Göl, 69, 70
Suin Dagh, 61
Sultan Alan, 130
Sultan Emir Su spring, 67
Sultan Su, 95
Supplies, 48
Sura, 58
Süret, 57
Susanbeli Pass, 98
Susuz Dagh, 15
Susuz Köi: *see* Usköi
Susuz Yaila, 66
Suyun Gözu, 85
Syedra, 106
Syedra ruins, 94
Syghyrlyk, 82
Syndan Ovasy, 25

T

Takhtajys, 42
Takhta Köprü, 135
Takhtaly Kahve, 71
Tarsus, 49
Tash Oluk, 106
Tash Scala: *see* Ak Liman
Tatly Su, 117
Taurus Range, 9, 11, 16, 134
Tefeni, 17, 22, 49, 68, 70
Tefeni Plain, 70
Teje Chai, 120
Tekichat Su, 29, 109
Tekichat Su gorge: *see* Korou Deresi
Tekir, 117
Tekiroghlan, 114
Tekke, 73
Telegraph, 49, 134, 137
Tepe Arasy, 99
Tepeli, 81
Tigris R., 9
Top Gedik Dagh, 14, 15, 124
Torumlar, 80, 83
Tossun Ali, 136
Tossun Khan: *see* Tossun Ali
Tota Beli Ridge, 25
Tota Bel Yaila, 85
Tracheia, 11
Tracheotis: *see* Low Taurus
Trade, 43
Trajan, Emperor, 94
Transport, 48
Tristomo Bay, 59
Tümük, 119
Turaida, 37, 122
Tyana: *see* Kyzly Hissar

U

Üllük Dagh, 13
Ulu Borlu, 49
Uluja Khan, 63
Ulukyshla, 46, 134, 136, 137
Ura, 113, 120
Urghudlu, 104
Usköi, 74
Uzunjaburj, 112, 113

V

Valleys, 30
Vegetation, 38, 39
Venetians, 41

W

Wheat, 31, 34

X

Xanthus R.: *see* Koja Chai
Xanthus Valley, 16, 30, 31, 44, 64

Y

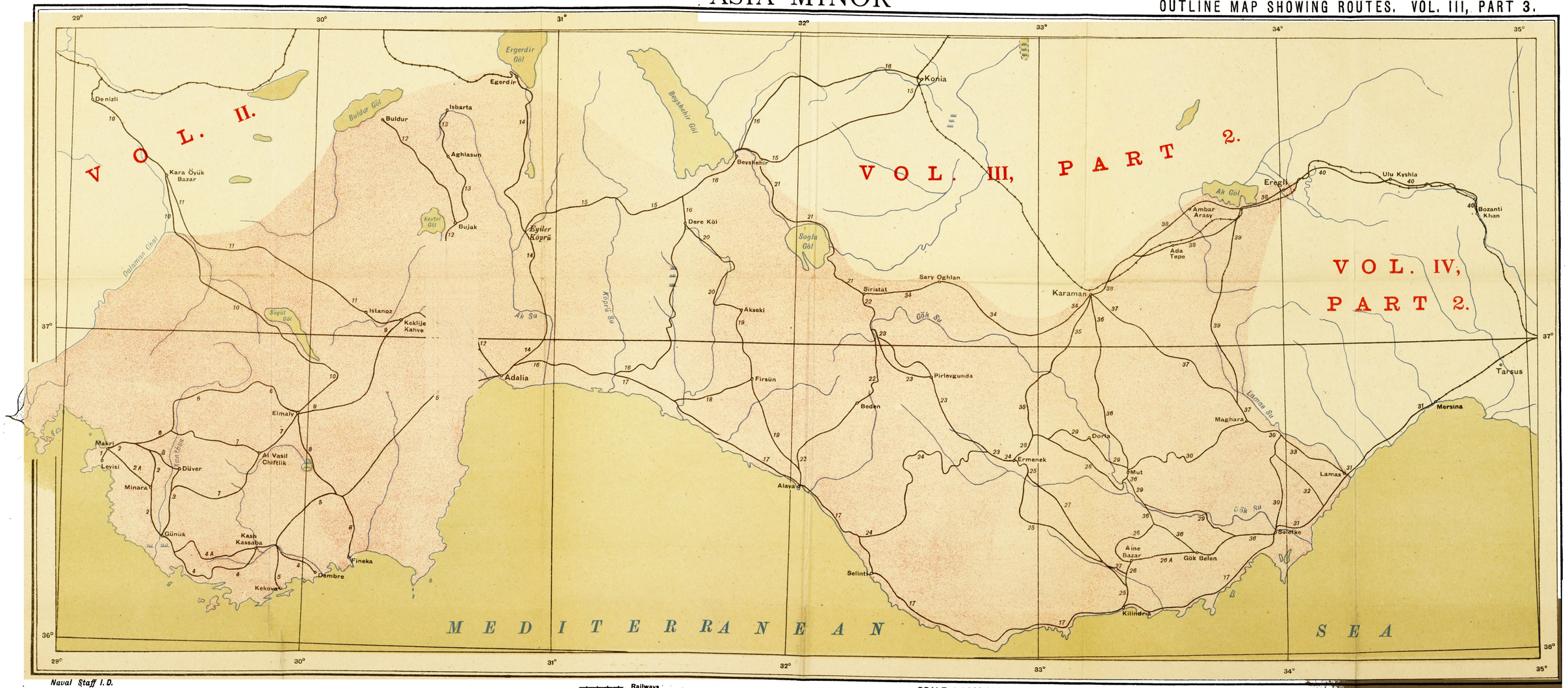
Yailany Chai, 21
Yakabagh, 52
Yalovach, 43
Yaly Bay, 59
Yaly Hüyük, 98
Yalynyz, 61
Yalynyz Dagh, 63
Yalynyzja Bagh, 108
Yapanly, 37, 128
Yaphynjy : *see* Yapanly
Yapunlu : *see* Yapanly
Yarly Dagh, 13
Yataghan, 68
Yazyköi, 70
Yazyly Kaya, 85
Yazir (nr. Keklije Kahve), 67
Yazyr (nr. Killepe), 61
Yazir (nr. Kum Avshar): *see* Yazyköi
Yazyr Pass, 60
Yedi Bel, 12, 13, 130
Yelli Bel Pass, 98, 101
Yeni Güdümen, 132
Yenije, 125, 128
Yenije Kahve, 71
Yeni Köi, 120
Yerengume, 68
Yer Köprü, 28
Ymrahor, 107
Yonuzlar, 86, 87
Yumrutash, 70
Yürüks, 42
Yusuf Chaush, 74
Yusufjy, 69

Z

Zamanty Su, 136
Zartavul Khan, 127
Zartavul Yaila, 127
Zeikir, 116
Zeine, 128
Zeitenek, 127
Zeive, 106
Zengibar Kalesi : *see* Assar Kalesi
Zeniya, 126
Zeniye : *see* Zeine
Zephyrium : *see* Capo Cavaliere
Zimri Dagh, 90

ASIA MINOR

OUTLINE MAP SHOWING ROUTES. VOL. III, PART 3.



Naval Staff I. D.

Railways

Routes

15

(The numbers are those of the routes in the Itineraries)

SCALE 1:1,000,000

Miles

Kilometres

GEORGETOWN UNIVERSITY LIBRARY
3 9020 02482069 1